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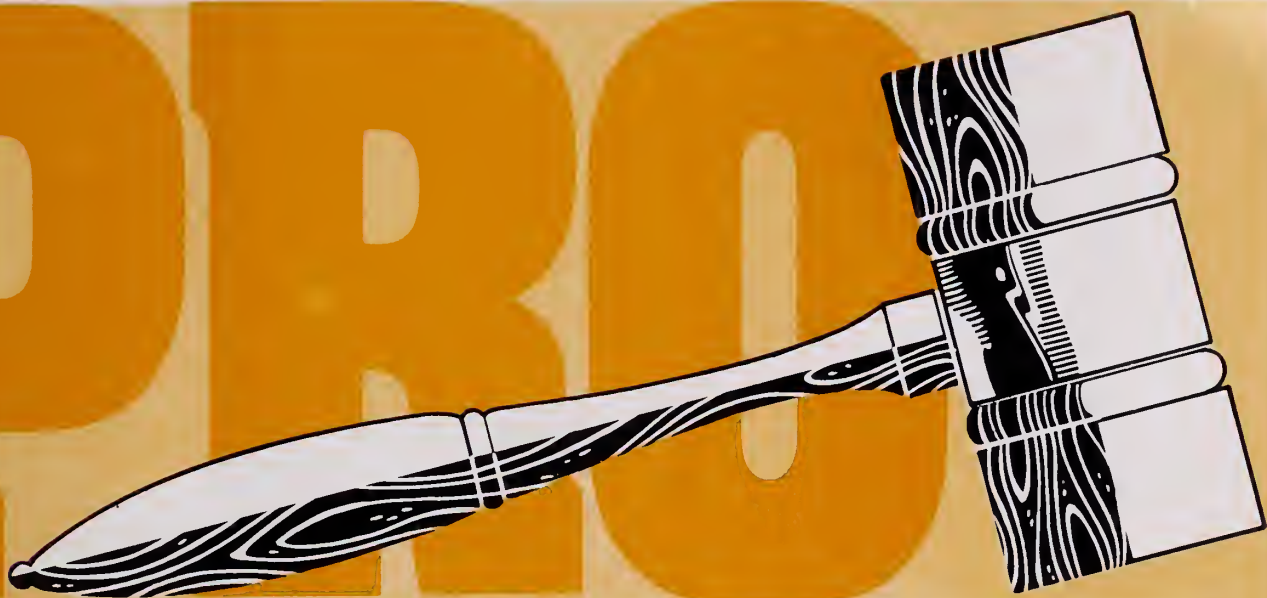




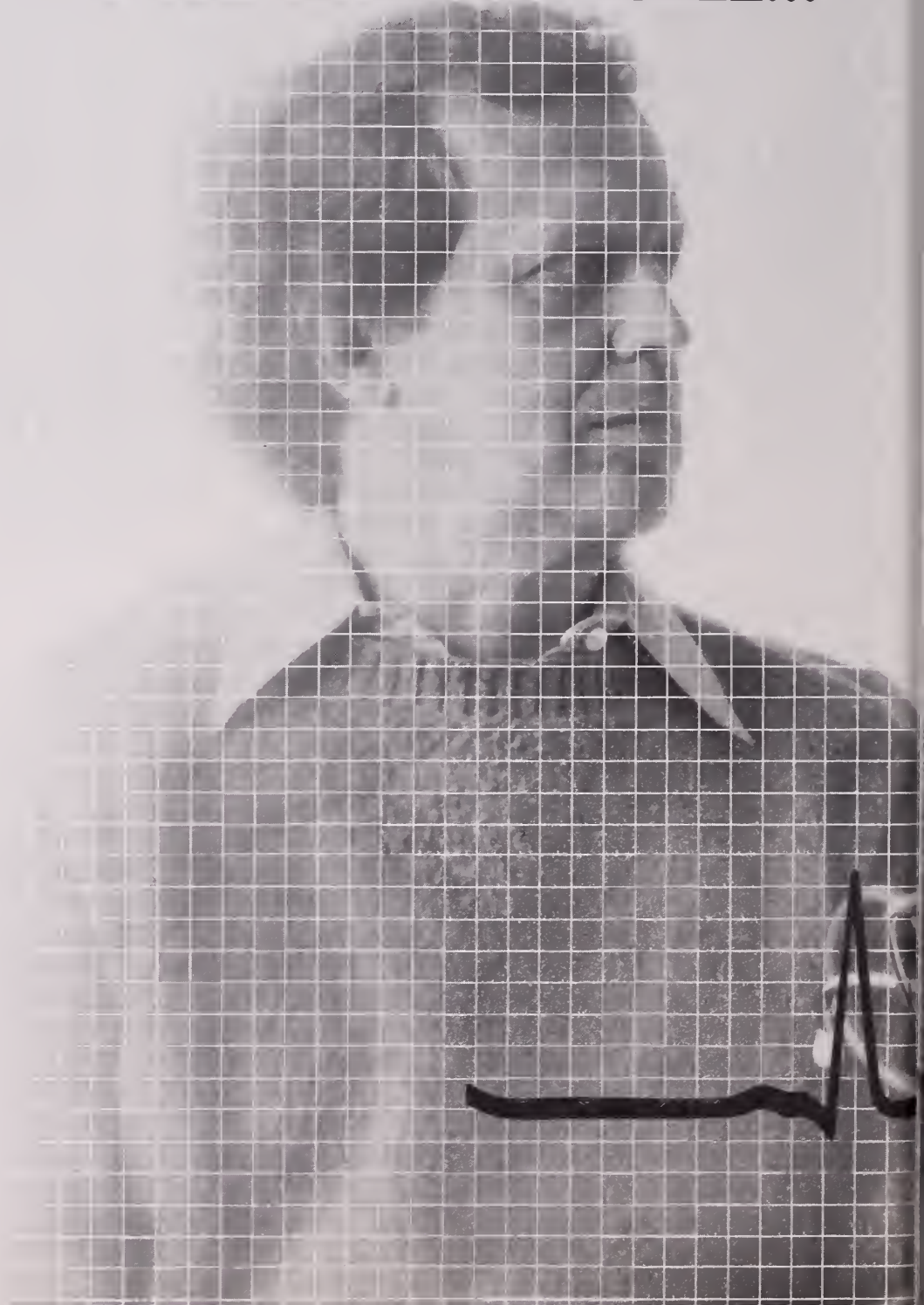
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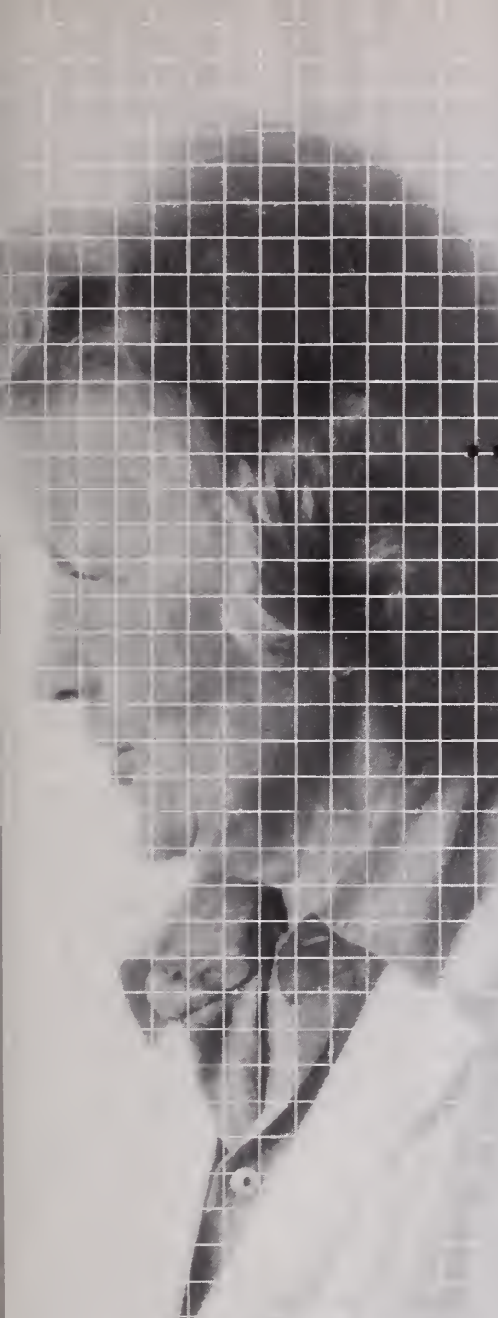
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JOURNAL *Oklahoma State Medical Association*



**THE PATIENT THINKS
HE HAS HEART TROUBLE...**





...YOU KNOW IT'S REALLY ANXIETY SYMPTOMS

His presenting symptoms: palpitations, chest pain, chronic exhaustion and occasional difficulties in breathing. Good reason for concern. A complete workup uncovers no organic dysfunction, but it *does* reveal excessively high levels of anxiety and apprehension.

For rapid relief you prescribe Valium (diazepam/Roche)

At times like this, Valium (diazepam/Roche) can be a potent therapeutic ally. It works promptly. Within just a few hours, the patient begins to feel calmer. And in a few days, anxiety relief not only becomes more pronounced but a noticeable reduction in anxiety-generated somatic symptoms also occurs.

Equally important, Valium is generally well tolerated. Side reactions more serious than drowsiness, ataxia and fatigue are rare. Patients should, of course, be cautioned against driving or drinking alcohol while on Valium therapy. Periodic reassessment of the need for antianxiety medication should also be performed.

VALIUM[®]

diazepam/Roche

2-mg, 5-mg, 10-mg scored tablets

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THE PATIENT NEEDS IT



Please see summary of product information on the following page.

VALIUM® (diazepam/Roche)

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Management of anxiety disorders, or short-term relief of symptoms of anxiety. Anxiety or tension associated with the stress of everyday life usually does not require treatment with an anxiolytic. Symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal, adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome; convulsive disorders (not for sole therapy).

The effectiveness of Valium (diazepam/Roche) in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma, may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication, abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms similar to those with barbiturates and alcohol have been observed with abrupt discontinuation, usually limited to extended use and excessive doses. Infrequently, milder withdrawal symptoms have been reported following abrupt discontinuation of benzodiazepines after continuous use, generally at higher therapeutic levels, for at least several months. After extended therapy, gradually taper dosage. Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed, drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation. The clearance of Valium and certain other benzodiazepines can be delayed in association with Tagamet (cimetidine) administration. The clinical significance of this is unclear.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported, should these occur, discontinue drug. Isolated reports of neutropenia, jaundice, periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. **Adults:** Anxiety disorders, symptoms of anxiety, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed, adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d., adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. **Geriatric or debilitated patients:** 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) **Children:** 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

How Supplied: For oral administration, Valium scored tablets—2 mg, white, 5 mg, yellow, 10 mg, blue—bottles of 100* and 500, * Prescription Paks of 50, available in trays of 10 * Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25,† and in boxes containing 10 strips of 10.†

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BEFORE USING INDERAL (PROPRANOLOL HYDROCHLORIDE), THE PHYSICIAN SHOULD BE THOROUGHLY FAMILIAR WITH THE BASIC CONCEPT OF ADRENERGIC RECEPTORS (ALPHA AND BETA) AND THE PHARMACOLOGY OF THIS DRUG.

CONTRAINDICATIONS

INDERAL is contraindicated in: 1) bronchial asthma; 2) allergic rhinitis during the pollen season; 3) sinus bradycardia and greater than first degree block; 4) cardiogenic shock; 5) right ventricular failure secondary to pulmonary hypertension; 6) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with INDERAL; 7) in patients on adrenergic-augmenting psychotropic drugs (including MAO inhibitors), and during the two week withdrawal period from such drugs.

WARNINGS

CARDIAC FAILURE. Sympathetic stimulation is a vital component supporting circulatory function in congestive heart failure, and inhibition with beta-blockade always carries the potential hazard of further depressing myocardial contractility and precipitating cardiac failure. INDERAL acts selectively without abolishing the inotropic action of digitalis on the heart muscle (i.e., that of supporting the strength of myocardial contractions). In patients already receiving digitalis, the positive inotropic action of digitalis may be reduced by INDERAL's negative inotropic effect. The effects of INDERAL and digitalis are additive in depressing AV conduction.

IN PATIENTS WITHOUT A HISTORY OF CARDIAC FAILURE, continued depression of the myocardium over a period of time can, in some cases, lead to cardiac failure. In rare instances, this has been observed during INDERAL therapy. Therefore, at the first sign or symptom of impending cardiac failure, patients should be fully digitalized and/or given a diuretic, and the response observed closely. a) if cardiac failure continues, despite adequate digitalization and diuretic therapy, INDERAL therapy should be immediately withdrawn; b) if tachyarrhythmia is being controlled, patients should be maintained on combined therapy and the patient closely followed until threat of cardiac failure is over.

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction following abrupt discontinuation of INDERAL therapy. Therefore, when discontinuance of INDERAL is planned, the dosage should be gradually reduced and the patient carefully monitored. In addition, when INDERAL is prescribed for angina pectoris, the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If INDERAL therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute INDERAL therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

IN PATIENTS WITH THYROTOXICOSIS, possible deleterious effects from long term use have not been adequately appraised. Special consideration should be given to propranolol's potential for aggravating congestive heart failure. Propranolol may mask the clinical signs of developing or continuing hyperthyroidism or complications and give a false impression of improvement. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. This is another reason for withdrawing propranolol slowly. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

IN PATIENTS DURING ANESTHESIA with agents that require catecholamine release for maintenance of adequate cardiac function, beta blockade will impair the desired inotropic effect. Therefore, INDERAL should be titrated carefully when administered for arrhythmias occurring during anesthesia.

IN PATIENTS UNDERGOING MAJOR SURGERY, beta blockade impairs the ability of the heart to respond to reflex stimuli. For this reason, with the exception of pheochromocytoma, INDERAL should be withdrawn 48 hours prior to surgery, at which time all chemical and physiologic effects are gone according to available evidence. However, in case of emergency surgery, since INDERAL is a competitive inhibitor of beta receptor agonists, its effects can be reversed by administration of such agents, e.g., isoproterenol or levaterenol. However, such patients may be subject to protracted severe hypotension. Difficulty in restarting and maintaining the heart beat has also been reported.

IN PATIENTS PRONE TO NONALLERGIC BRONCHOSPASM (e.g., CHRONIC BRONCHITIS, EMPHYSEMA), INDERAL should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

DIABETICS AND PATIENTS SUBJECT TO HYPOLYCEMIA. Because of its beta-adrenergic blocking activity, INDERAL may prevent the appearance of premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia. This is especially important to keep in mind in patients with labile diabetes. Hypoglycemic attacks may be accompanied by a precipitous elevation of blood pressure.

USE IN PREGNANCY. The safe use of INDERAL in human pregnancy has not been established. Use of a drug in pregnancy of women of childbearing potential requires that the possible risk to mother and/or fetus be weighed against the expected therapeutic benefit.

Embryotoxic effects have been seen in animal studies at doses about 10 times the maximum recommended human dose.

PRECAUTIONS

Patients receiving catecholamine depleting drugs such as reserpine should be closely observed if INDERAL is administered. The added catecholamine blocking action of this drug may then produce an excessive reduction of the resting sympathetic nervous activity. Occasionally, the pharmacologic activity of INDERAL may produce hypotension and/or marked bradycardia resulting in vertigo, syncope, attacks, or orthostatic hypotension.

As with any new drug given over prolonged periods, laboratory parameters should be observed at regular intervals. The drug should be used with caution in patients with impaired renal or hepatic function.

ADVERSE REACTIONS

Cardiovascular: bradycardia, congestive heart failure, intensification of AV block, hypotension, paresthesia of hands, arterial insufficiency, usually of the Raynaud type, thrombocytopenic purpura.

Central Nervous System: lightheadedness, mental depression manifested by insomnia, lassitude, weakness, fatigue, reversible mental depression progressing to cataplexy, visual disturbances, hallucinations, an acute reversible syndrome characterized by disorientation of time and place, short term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics.

Gastrointestinal: nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis.

Allergic: pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm, and respiratory distress.

Respiratory: bronchospasm.

Hematologic: agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura.

Miscellaneous: reversible alopecia. Oculomucocutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta blocker (practolol) have not been conclusively associated with propranolol.

Clinical Laboratory Test Findings: Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DOSAGE AND ADMINISTRATION

ORAL
HYPERTENSION. Dosage must be individualized. The usual initial dosage is 40 mg INDERAL twice daily, whether used alone or added to a diuretic. Dosage may be increased gradually until adequate blood pressure is achieved. The usual dosage is 160 to 480 mg per day. In some instances a dosage of 640 mg may be required. The time needed for full hypertensive response to a given dosage is variable and may range from a few days to several weeks.

While twice-daily dosing is effective and can maintain a reduction in blood pressure throughout the day, some patients, especially when lower doses are used, may experience a modest rise in blood pressure toward the end of the 12 hour dosing interval. This can be evaluated by measuring blood pressure near the end of the dosing interval to determine whether satisfactory control is being maintained throughout the day. If control is not adequate, a larger dose, or 3 times daily therapy may achieve better control.

PEDIATRIC DOSAGE.
At this time the data on the use of the drug in this age group are too limited to permit adequate directions for use.

INTRAVENOUS
The intravenous administration of INDERAL has not been evaluated adequately in the management of hypertensive emergencies.

OVERDOSAGE OR EXAGGERATED RESPONSE.
IN THE EVENT OF OVERDOSAGE OR EXAGGERATED RESPONSE, THE FOLLOWING MEASURES SHOULD BE EMPLOYED:

BRADYCARDIA: ADMINISTER ATROPINE (0.25 to 1.0 mg). IF THERE IS NO RESPONSE TO VAGAL BLOCKADE, ADMINISTER ISOPROTERENOL CAUTIOUSLY.

CARDIAC FAILURE—DIGITALIZATION AND DIURETICS.

HYPOTENSION—VASOPRESSORS e.g., LEVATERENOL OR EPINEPHRINE (THERE IS EVIDENCE THAT EPINEPHRINE IS THE DRUG OF CHOICE).

BRONCHOSPASM: ADMINISTER ISOPROTERENOL AND AMINOPHYLLINE.

HOW SUPPLIED

TABLETS INDERAL (propranolol hydrochloride)
No. 461 Each scored tablet contains 10 mg of propranolol hydrochloride in bottles of 100 and 1,000. Also in unit dose package of 100.
No. 462 Each scored tablet contains 20 mg of propranolol hydrochloride in bottles of 100 and 1,000. Also in unit dose package of 100.
No. 464 Each scored tablet contains 40 mg of propranolol hydrochloride in bottles of 100 and 1,000. Also in unit dose package of 100.
No. 468 Each scored tablet contains 80 mg of propranolol hydrochloride in bottles of 100 and 1,000. Also in unit dose package of 100.

INJECTABLE
No. 3265 Each ml contains 1 mg of propranolol hydrochloride in Water for Injection. The pH is adjusted with citric acid. Supplied as 1 ml ampuls in boxes of 10.

Reference: 1. Freis, E. D. Hypertension (Suppl. II) 3:230 (Nov-Dec) 1981.

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INDICATIONS: Therapeutically (as an adjunct to systemic therapy when indicated), for infections, primary or secondary due to susceptible organisms, as in: • infected skin grafts, surgical incisions, otitis externa • primary pyodermites (impetigo, eczema, sycosis vulgaris, paronychia) • secondarily infected dermatoses (eczema, herpes, borrelic dermatitis) • traumatic lesions, inflamed or suppurating as a result of bacterial infection. Prophylactically, the ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and promote wound healing.

CONTRAINDICATIONS: Not for use in the eyes or in the external ear canal if the eardrum is perforated. This product is contraindicated in those individuals who have shown hypersensitivity to any of its components.

WARNING: Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neo-



mycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended.

When using neomycin-containing products to control secondary infection in the chronic dermatoses, it should be borne in mind that the skin is more liable to become sensitized to many substances, including neomycin. The manifestation of sensitization to neomycin is usually a low grade reddening with swelling, dry scaling and itching. It may be manifest simply as a failure to heal. During long-term use of neomycin-containing products, periodic examination for such signs is advisable and the patient should be told to discontinue the product if they are observed. These symptoms regress quickly on withdrawing the medication. Neomycin-containing applications should be avoided for that patient thereafter.

PRECAUTIONS: As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

ADVERSE REACTIONS: Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML



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Decreation

If the word looks strange or unfamiliar to you, be not surprised. My Webster's indicates it is rarely used. And the adjective form, *decreational*, isn't even listed. In spite of these philologic facts however, it seems to me the time has come to extricate these words from the pungent recesses of the cedar chest and put them to work. They are needed and they are precisely tailored for their tasks.

As an authentic foggy, I am consistently shocked — occasionally even horrified — when illicit drugs are referred to as *recreational* drugs, and I hear them captioned as such with increasing frequency. A few weeks ago I encountered this outrageous word-abuse in an article which appeared in one of our profession's most prestigious publications.

There is, quite simply, no possible justification for classifying illicit drugs as recreational agents. To do so is to pervert the language to a criminal extent. To do so is to impart a benignancy to one of contemporary mankind's most lethal malignancies; to plead credibility for a lie; to do so is to certify misery as pleasure, degradation as restorative and death as rejuvenation.

It is time to put a stop to this idiocy. If the word *illicit* is too harsh or threatening or malevolent, the word *recreational* is hideous deception. If the word *illicit* must be replaced as a modifier for drugs which are obtained illegally, the only appropriate substitute is *decreational*.

My Webster's defines *decreation* as annihilation and, I presume, the adjective form would thus be *annihilational*. That is the right word for illicit drugs. That is precisely the right word.

Decreational drugs. Has a nice, clean, honest ring to it, doesn't it?

MRJ

We ordinarily think of misbehavior as acts of our children and grandchildren which are contrary to our wishes or instructions, and which are due to lack of judgment, inexperience, or carelessness. However, it is also true that misbehavior on the part of people in general is responsible for most of the woes of mankind, and leads us to blame our individual guilt on external forces, luck, or fate. We then feel free to continue our irresponsible ways and so add to our problems.



This premise applies to all people, in all walks of life, and to the medical profession. General belief in the concept that most misbehavior is due to the lack of money and or the lack of acceptance has led our society to attempt to supply all of us lacking in the above hole cards with large sums of money and federal regulations (supported by taxation), and thereby make us responsible individuals who do not misbehave. The nirvana of such an idealistic condition has not been reached. One has only to observe the rising crime rate, increasing use of drugs, soaring dependency rate, and the fact that over half of the 50,000 fatalities in automobile accidents each year are caused by drunken drivers, to realize that misbehavior is on the increase despite this approach to prevent it.

In the broader sense, the members of the medical profession are not prime or even minor

offenders in this protean fiasco. It is evident, however, that misbehavior on the same basis does exist in our daily efforts to practice medicine. Irresponsibility in our kindness, humaneness, and concern we manifest to our patients; in our record keeping; in our non-professional attitudes toward people in the nursing and ancillary services; in our use of diagnostic and therapeutic measures; in our lack of consideration of our colleagues — all these are only some of the factors which cause us to be accused of arrogance, inhumanity, lack of interest, playing God, failure to control medical costs, and all the influences which reduce the image of our most honored profession, result from our misbehavior. None of these are illegal, but they do constitute misbehavior, and do not fall within the ethical precepts of medical practice.

The problem of misbehavior in our society or our profession cannot be solved by rules and regulations, by medical staff censure, or even condemnation by our peers. We must resurrect the concept that the individual, and no one else, is responsible for what he does. If each of us, as members of society and our profession will resume this concept and execute it to our fullest ability, a marvelous and almost miraculous improvement in all our lives must result. Let us stop feeling guilty and looking over our shoulder all the time, to see who or what is about to catch us, by ceasing to include misbehavior as one of our faults.

John A. McIntyre, M.D.

Septicemia in General Surgery Patients Incidence and Characterization at a Veteran's Hospital

BONNIE M. MILLER, MD
D. J. FLOURNOY, PhD
J. P. CANNON, MD

The incidence of septicemia on the general surgery services at Oklahoma City Veterans Administration Medical Center was 2.3% for the period 1977-1979. The majority of the attacks were nosocomial. The relationship between malnutrition, immunity and hyperalimentation is discussed.

INTRODUCTION

Septicemia has increased in both frequency and fatality since the advent of antibiotics and this rise has been attributed to changes in both host and pathogen populations.¹⁻⁴ Patients are older, suffer more frequently from chronic disease, undergo a greater number of increasingly complex procedures, remain hospitalized longer and are more commonly instrumented

with vascular catheters, urinary catheters and endotracheal tubes.^{2,3} They are more often rendered susceptible to infection by immunosuppression with chemotherapeutics and corticosteroids.⁵ In addition, malnutrition now occurs with alarming frequency in hospitalized patients and recent reports have demonstrated its relation to septic and nonseptic hospital complications.⁶⁻⁸

The selective pressure of antibiotics, together with these host factors, creates a continually changing spectrum of etiologic agents. The initial rise in gram negative septicemia which occurred after introduction of antibiotics was followed by a rise in antibiotic-resistant septicemias and fungemias. The incidence of gram negative sepsis has now stabilized, or may be even declining and new prominence is reported for anaerobes, gram positives and organisms previously thought to be nonpathogenic.⁹⁻¹³ This is of importance for the following reasons: 1) Sepsis remains an important cause of death in surgical patients and 2) at least one host factor, malnutrition, has direct effects on immune competence, which may be reversible with hyperalimentation.¹⁴

Septicemia is a problem which changes with time and varies from institution to institution. This study was undertaken to assess the status of septicemia at the Veterans Administration

From the Department of Surgery, University of Oklahoma Health Sciences Center and the Veterans Administration Medical Center, Oklahoma City, Oklahoma.

Medical Center in Oklahoma City and to evaluate certain factors in surgical patients which might increase both their susceptibility to attack and their subsequent mortality.

MATERIALS AND METHODS

Septicemia was defined as positive blood cultures occurring in patients with clinical manifestations of sepsis. A log of all positive blood cultures between January 1, 1977 and December 31, 1979 was obtained from the Microbiology Section of the Veterans Administration Medical Center. All positive cultures during this period had been reported to the same infection control nurse at the time of attack. This nurse visited each patient, reviewed the chart, verified the attack and filed information on age, hospital service and organisms cultured from all sites. From this file and the blood culture log, a list of all general surgery patients with septicemia was compiled and the following information gathered: age, duration of hospitalization prior to attack, organisms cultured and outcome.

Charts of the 39 patients whose attacks occurred in 1977 and 1978 were sought for detailed study. Five charts were not available, leaving 34 patients in the review. The following data were obtained: underlying illness, procedures performed, all positive cultures from all sites, antibiotics used prior to septicemia, treatment with steroids, radiation or chemotherapeutics, presence of vascular catheters, urinary catheters or endotracheal tubes, white blood cell count on day of admission and day of attack, other complications and clinical manifestations of attack. Complications included congestive heart failure, respiratory failure, wound dehiscence, fistula formation, deep vein thrombosis, pulmonary embolus, myocardial infarction, cerebrovascular accident and pancreatitis.

Data were tabulated and tested for statistical significance using the X^2 contingency table, and the Spearman rank correlation coefficient.

RESULTS

Incidence, Age and Mortality—Of 2735 patients admitted in this three-year period, 54 suffered a total of 63 septicemias, for an attack rate of 2.3%. Eight of the patients suffered two distinct attacks while one patient suffered

Table 1.

Age and Mortality

Age	Number (%)	Deaths	Mortality
≤50	4 (7.4)	2	50.0%
50-59	21 (38.8)	9	42.8%
60-69	18 (33.3)	10	55.6%
≥70	11 (20.3)	3	27.3%*
Total	54 (100)	24	44.4%

*Not statistically significant

three. Mortality for the affected population was 44.4%, compared to 3.4% for the entire general surgery population over the same period. Nine patients (16.7%) died within one week of positive culture while another 15 (27.7%) died after one week. The patients ranged in age from 29 to 87 years with a mean age of 61.9 years. Over 70% of the cases occurred in patients between ages 50 and 69 years. Mortality did not increase with age; rather, the lowest mortality occurred in the over-70 age group (Table 1).

Nosocomial versus Community-Acquired Attacks — Community-acquired attacks were defined as those occurring in the first three days of hospitalization. All others were considered nosocomial. Fifty-two (82.5%) of the 63 attacks were nosocomial while 11 (17.5%) were community-acquired. Nosocomial attacks had a mortality of 50.0% compared to 36.4% for community-acquired attacks. The mean duration of hospitalization before a nosocomial attack was 31.5 days, \pm 25.7 days, with a range of four to 210 days. Mortality of these attacks did not vary significantly with duration of hospitalization.

Organisms — A total of 66 organisms were isolated. Thirty-eight (57.5%) were gram negative, 24 (36.3%) were gram positive and four (6%) were fungal. Six of the organisms (9.9%)

Table 2.

Classification of Organisms and Mortality

Classification	Number (%)	Deaths	Mortality*
Gram negative	38 (57.5)	13	34.2%
Gram positive	24 (36.5)	13	54.2%
Fungal	4 (6.0)	4	100.0%
Anaerobes	6 (9.9)	1	16.6%
K-E-S species	13 (19.7)	5	38.5%
Gentamicin-resistant organisms	7 (10.6)	3	42.8%

*None of the differences in mortality were statistically significant

Table 3.
Organisms Causing Septicemia

Organism	Number	(%)
<i>Escherichia coli</i>	10	(15.2)
<i>Pseudomonas aeruginosa</i>	8	(12.5)
<i>Staphylococcus epidermidis</i>	8	(12.5)
<i>Klebsiella pneumoniae</i>	7	(10.7)
<i>Staphylococcus aureus</i>	7	(10.7)
Group D <i>Enterococcus</i>	5	(7.6)
<i>Serratia marcescens</i>	4	(6.1)
<i>Bacteroides fragilis</i>	3	(4.5)
<i>Candida albicans</i>	3	(4.5)
<i>Enterobacter cloacae</i>	2	(3.0)
<i>Streptococcus pneumoniae</i>	2	(3.0)
<i>Proteus mirabilis</i>	1	(1.5)
Others	6	(9.9)
Total	66	(100)

were anaerobic (Table 2). Gram positive organisms were more commonly associated with death than gram negative organisms, although this was not statistically significant. All of the patients with fungal septicemias died. Of the 38 gram negative organisms, seven were gentamicin-resistant and mortality of these attacks was 42.8%.

Escherichia coli was the single most frequent isolate, followed by *Pseudomonas aeruginosa*, *Staphylococcus epidermidis*, *Staphylococcus aureus* and *Klebsiella pneumoniae* (Table 3).

Chart Review — The following data pertain to the 34 patients included in the chart review. These patients experienced a total of 38 septicemic episodes. They did not differ significantly from the entire affected population in outcome, proportion of nosocomial attacks or proportion of gram positive, gram negative and fungal attacks.

Hypoalbuminemia — Hypoalbuminemia (serum albumin ≤ 3.5 g/dl) was found frequently in these patients. Twenty-nine (85.3%) of the 34 patients studied were hypoalbuminemic at the time of first attack and eventual mortality increased with degree of serum albumin depression. The Spearman rank correlation coefficient for this relationship was 0.998. None of the patients with normal albumin at the time of attack died (Table 4), PFO.02. Sixteen of the patients (47.1%) were hypoalbuminemic at time of admission and these pa-

Table 4.
Hypoalbuminemia at Time of First Attack

Serum albumin (g/dl)	Number (%)	Deaths	Mortality**
≥ 3.5	5 (14.7)	0	0
3.0-3.4	8 (23.5)	2	25.0%
2.5-2.9	10 (29.4)	5	50.0%
≤ 2.5	11 (32.4)	9	81.8%
Total ≤ 3.5	29 (85.3)	16	55.1%*

* $p \leq .02$

**Spearman rank correlation coefficient for degree of hypoalbuminemia and mortality was 0.998

tients had a greater mortality than those with normal admission albumins. Patients with falling albumins had a worse prognosis than those with stable or improving albumins (Table 5), although this was not statistically significant.

Chronic Underlying Illness—Chronic underlying illness occurred in 31 patients (91.2%). Alcohol abuse occurred most commonly, followed by atherosclerotic disease, diabetes mellitus and neoplasm. Neoplasm and alcohol abuse were associated with increased mortality, while diabetes and atherosclerotic disease were not. No mortality occurred in the three patients without underlying illness (Table 6). Alcohol abusers had three times the mortality of non-abusers (PFO.01), although there was no significant difference in rates of admission hypoalbuminemia or hypoalbuminemia at time of first attack.

Source of Septicemia — The source of septicemia was defined as that site from which the organism causing septicemia was cultured on the same day as attack or an earlier date. Using this definition, a source could be assigned to only 27 of the 38 attacks (Table 7). Wound infection provided the most frequent source, accounting for nine attacks. Infected intravenous sites, pulmonary infections and intra-abdominal foci caused five attacks each. The urinary tract provided the source in only two cases. Three of the patients in whom a source could not be determined developed a se-

Table 5.
Admission Hypoalbuminemia

Serum albumin (g/dl)	Number (%)	Deaths	Mortality
≥ 3.5	18 (52.9)	6	33.3%
≤ 3.5	16 (47.1)	10	62.5%

Table 6.
Chronic Underlying Illness

Illness	Number	(%)	Mortality
Alcohol	17	(50.0)	70.1%
Non-abusers	17	(50.0)	23.5%*
Atherosclerotic vascular disease	16	(47.1)	37.5%
Neoplasm	4	(11.8)	75.0%
Diabetes mellitus	4	(11.8)	50.0%
Chronic renal disease	3	(8.8)	33.3%
Congestive heart failure	2	(5.9)	50.0%
Chronic lung disease	3	(11.8)	33.3%
Other	3	(11.8)	33.3%

*p[†]0.01

vere phlebitis coincident with the onset of their septic symptoms. Infected intravenous sites were the most likely sources in these patients, but the cultures needed for confirmation had not been ordered.

Other Complications-Septic — Remote infection was defined as a positive culture for an organism other than that causing septicemia. Twenty-four patients (70.9%) had a remote infection during their hospital course. Twenty-one patients (58.8%) suffered one or more non-septic complications (Table 8). Eight patients (23.5%) had fistula formation, while six (25% of those with abdominal incisions) experienced wound dehiscence. Mortality was 60% for those with nonseptic complications, compared to 28.5% for those without (PJ.1).

Procedures — Thirty-four patients underwent a total of 63 procedures and sixteen pa-

Table 7.

Source of Septicemia

Source	Number	(% of attacks)	Mortality
Wound	9	23.7	44.4%
Intravenous site	5	13.2	40.0%
Pulmonary	5	13.2	80.0%
Intra-abdominal focus	5	13.2	20.0%
Urinary tract	2	5.3	100.0%
Gangrenous toe	1	2.6	0
Other	11	28.9	27.2%

Table 8.

Non-Septic Complications

Complication	Number	(%)
Fistula formation	8	(23.5)
Wound Dehiscence	6	(25.0)*
Respiratory failure	4	(11.8)
Congestive heart failure	2	(5.9)
Cerebrovascular accident	2	(5.9)
Anastomotic breakdown	1	(2.9)
Deep vein thrombosis	1	(2.9)
Pulmonary embolus	1	(2.9)
Pancreatitis	1	(2.9)

*Of those with abdominal incisions

tients (47.1%) eventually required multiple operations (Table 9). Gastrointestinal procedures were performed most commonly, with over half the patients undergoing some gastrointestinal surgery during their hospital stay.

Prior Antibiotics or Immunosuppressives — Thirty-one (81.6%) of the 38 attacks were associated with prior antibiotic usage. Gram positive organisms caused six of the seven attacks not associated with prior antibiotics. All four of the patients with septicemias caused by gentamicin-resistant organisms had previously been on antibiotics.

Only five (14.7%) of the thirty-four patients received adrenal steroid therapy prior to attack. None of the patients received chemotherapy or radiation.

Clinical Manifestations — The most common manifestation of attack was temperature elevation, occurring with 33 of the 38 attacks (86.6%) as noted in Table 10. Of the five attacks accompanied by normal or low temperature, four were eventually fatal (80.0%). Hypothermia accompanied both of the fungemias. Leukocytosis (WBC $\times 10^3$

Table 9.

Procedures

Type of Surgery	Number	Number of Patients	% of Patients
Gastrointestinal	28	18	(52.9)
Vascular	12	6	(17.6)
Amputation	7	3	(8.8)
Tracheostomy	5	5	(14.7)
Biliary	4	3	(8.8)
Other	7	6	(17.6)

Table 10.

Clinical Manifestations

Symptom	Number	% of Attacks
Fever	33	86.8
Leukocytosis	26	68.4
Abnormal liver function tests	15	39.5
Hypotension	14	36.8
Oliguria	13	34.2
Obtundation	11	28.9
Chills	9	23.7
Diaphoresis	5	13.2
Hypothermia	5	13.2
Body aches	3	7.9
Nausea/vomiting	2	5.3
Guaiac positive nasogastric aspirate	2	5.3
Hypertension	2	5.3

cells/mm³) occurred with 26 attacks (68.4%). Twenty attacks (52.6%) were associated with white blood cell counts greater than 15×10^3 , and ten with white cell counts greater than 20×10^3 cells/mm³ (26.3%). A normal white blood cell count was not associated with increased mortality. Abnormal liver function tests coincided with 15 of the 38 attacks (39.5%). This must be interpreted with caution in view of the high alcoholism rate, although abnormal values were found as frequently in alcohol non-abusers as in alcohol abusers. Hypotension was noted with only fourteen of the attacks, oliguria with eleven and chills with nine. Oliguria progressed to acute renal failure in three attacks and all three were fatal.

DISCUSSION

The 2.3% incidence of septicemia observed in these general surgery patients is difficult to compare with results from other institutions. Frequencies of 0.56% to 3.8% have been reported for entire hospital populations differing from the group under study in age, sex and diagnosis.^{1, 13, 15, 16} The incidence of nosocomial septicemias on the general surgery services of the Johns Hopkins Hospital was 0.99% for the years 1968 to 1974, approximately twice the rate observed for that hospital's entire population.¹⁷ In the present study, the nosocomial rate was 1.9%. The mortality of 44.4% compares well with that at other institutions, but the frequently reported increased mortality with age was not observed.^{1, 2}

Of the organisms isolated, 57.5% were gram negative, 36.5% were gram positive and six percent were fungal. *Escherichia coli* was the single most frequent isolate, but when organisms of the K-E-S group were counted together, they surpassed *E. coli* in frequency. Other reports similarly show *E. coli* and K-E-S species to be the most common etiologic agents, but vary with regard to which actually predominates and to the incidence trends for each.^{2, 3, 15, 16} In the present study, 9.9% of the isolates were anaerobes. This is slightly higher than the percentages found at other institutions, but an increasing trend has been noted, at least part of which is due to improved isolation techniques.^{13, 16}

One-third of the gram positive organisms isolated were *Staphylococcus epidermidis* and until recently these would have been dismissed as contaminants, except perhaps in patients with prosthetic heart valves. This organism is now gaining regard as a pathogen causing septicemia in patients with multiple indwelling intravenous catheters.¹¹ In this study, patients with *S. epidermidis* septicemia had a 50% mortality. Seven of the eight organisms isolated had multiple antibiotic resistance patterns and none were susceptible to penicillin. Five of the

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affected patients were included in the chart study and four of these had at least two indwelling intravenous catheters. Cultures positive for *S. epidermidis* should be taken seriously when they occur in severely ill patients with clinical signs of sepsis.

Wound infection provided the most common source of septicemia in this group, while the urinary tract yielded the portal of entry in only two cases. This differs from most other studies, which report the urinary tract as the most common source.^{2, 4, 15, 17} Many of these studies dealt with medical as well as surgical patients and thus a lower incidence of the wound as a source should be expected. Even Altemeir's² report on general surgery patients in 1967, however, documented the urinary tract as the most frequent portal of entry. Studies over the past decade show an increase in integumentary sources of sepsis and perhaps the present observations reflect these trends.

Of particular interest was the high proven and suspected incidence of intravenous sites as the source of sepsis. This complication of intravenous therapy was first recognized in the 1940's, soon after the introduction of the plastic catheter.¹⁸ It gained importance over the next two decades, and in 1973, Altemeir described the problem in surgical patients, naming it "third day surgical fever."¹⁹ He estimated that 70% of all intravenous catheters dwelling over 72 hours will result in phlebitis¹⁰ and others estimate that 2.5% of all catheters dwelling over 48 hours will cause septicemia.²⁰ Central venous catheters were the source of two septicemias and the incidence of this complication is estimated at 7-33%.⁵

Hypoalbuminemia at the time of first attack occurred in 85.3% of the cases reviewed and mortality increased with degree of serum albumin depression. In other studies, hypoalbuminemia accurately predicted septic and nonseptic postoperative complications⁸ and correlated well with decreased neutrophil function.²¹ Unless spuriously depressed by fluid imbalance, low serum albumin represents significant depletion of protein stores and thus malnutrition. Recognition of malnutrition as a poor prognostic factor is not new, but dates back to at least 1925 when Studley²² discovered that patients losing greater than 20% of their body weight suffered increased mortality after ulcer surgery.

Malnutrition has long been associated with

increased susceptibility to infection. Attempts to elucidate the mechanism of this effect began as early as 1944, when Cannon²³ demonstrated decreased gamma globulin synthesis in protein-depleted rats. Since then, a wealth of sometimes conflicting data has been gathered on the interaction between malnutrition and immunity. Malnutrition has been shown to interfere with nearly all host defense mechanisms, including cell mediated immunity, humoral immunity, neutrophil and macrophage function and serum complement activity.^{14, 24-26} Infection itself exacerbates the problem of malnutrition by increasing protein catabolism. A vicious cycle develops in which patients rendered susceptible by malnutrition become infected, grow increasingly malnourished and then increasingly susceptible to repeated infections.^{27, 28} This may explain the high incidence of remote infections in the present study. The data presented here lend clinical support to the interaction between malnutrition and infection. Specifically, it suggests that malnutrition causes some defect in immune function which allows organisms to invade the blood stream and that the ability of the patient to survive such attacks is related to the degree of malnutrition.

Of great importance to the clinician are recent reports that hyperalimentation reverses certain nutritional impairments of immune function. Results are occasionally contradictory, but hyperalimentation has been shown to reverse anergy, improve T-cell response to mitogens, increase antibody formation and return serum complement levels to normal.^{15, 25, 29-32} It remains to be shown that these measured improvements of immune function are accompanied by an actual decrease in postoperative mortality due to sepsis; no prospective study could be found specifically testing whether perioperative nutritional support prevents subsequent septicemia or improves survival when attacks occur. Such studies need to be performed. In the meantime, however, it seems warranted to closely monitor nutritional status and to institute appropriate therapy before disasters occur.

Nonseptic complications were experienced frequently in the group under study, with fistula formation occurring in 23.5% and wound dehiscence in 25% of those with abdominal incisions. Merely listing these complications however, does not adequately portray the hopelessly stormy hospital course that many of these patients suffered. Nonseptic complica-

tions are also known to relate to nutritional factors and their incidence correlates well with hypoalbuminemia and anergy.^{8, 33} It seems certain that malnutrition, nonseptic complications and sepsis interact in a complex cause-and-effect manner. The present study indicates that serious nonseptic complications should alert the physician to a compromised host at risk of developing fatal septicemia.

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Understanding the Medical Past Through Literature: Bloodletting and the Louisiana Swamp Doctor

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Bloodletting, a therapeutic technique used from ancient times until the late nineteenth century, can be put in historical context through reading literature of the appropriate period.

Students already in or advancing toward the health professions generally have an inflated vision of the medical world. They "know" that germs cause disease, that antibiotics cure disease, and that sophisticated technology solves many medical problems. To them the medical practices of even twenty or thirty years ago are archaic and often now useless. Those of 100, 200, or 2000 years ago are judged illogical, unscientific, and barbaric. The medical past has no meaning, no connection with the present, no context.

It is the task of the medical educator to provide students with an historic sense otherwise so lacking in their education. "Pre-

sentist" thinking — judging the past by modern-day standards — needs to be replaced with an understanding of how and why people acted as they did, medically speaking. Students must learn to put themselves in the situation of those they are studying before making judgments about past practices. Once they make this giant step backwards in time, space, and culture, they realize that 50 or 100 years from now some modern cures and techniques will seem equally strange, even inhumane.

Literature can serve as an excellent means for recalling the temper or defining the culture of a specific time and place. Leo Tolstoy's "The Death of Ivan Ilych," because it so dramatically gets inside the heart and mind of a dying person, can be read with profit by those wishing to gain some understanding of dying. William Carlos Williams' "The Girl With a Pimple Face" and "The Use of Force" view the physician-patient interaction from the former's perspective and provide a rich source for thought and discussion with physicians-to-be. Moliere's spoofs on 17th century physicians and Dickens' characterizations of 19th century English medicine allow students to tap great literature as a means of understanding the medicine of a time period and culture.

Ask modern students how they would react if their physicians told them that the only certain cure for a bad cold was bloodletting and that they must bare their chests for a scarification and cupping procedure. The universal response is, as might be expected, one of disgust, horror, and incredulity that people actually allowed this procedure to be performed on them. Displaying a scarifier and cups and describing their use only increases these negative attitudes. People cannot connect this curative technique with anything familiar and positive in the present, so they roundly condemn the practice and write it off as useless. The historical context is lacking.

The pre-Civil War American South did not produce much great literature. It seems an unlikely place to seek useable material on the practice of bloodletting. What remains of interest to modern readers of indigenous Southern antebellum literature is a number of works of local color such as Augustus Baldwin Longstreet's *Georgia Scenes* (1835), and Joseph G. Baldwin's *The Flush Times of Alabama and Mississippi* (1853), which depict life in the Old South. One gem of this genre which illustrates both the lifestyle of town and plantation as well as the state of Southern medicine, is a series of sketches published separately in the 1840s and then collected in a book entitled *Louisiana Swamp Doctor*. These short pieces tell the true but embellished story of Henry Clay Lewis, alias Madison Tensas, MD, an apprentice- and medical school-trained physician. The entire collection has been edited recently by John Q. Anderson (Baton Rouge, 1962).

Among the experiences Tensas relates is one in which the common practice of bloodletting plays a central role. It takes Tensas two pages to convey in a way that pictures or

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One of the popular scarifiers.

textbook descriptions cannot, the meaning of bloodletting to mid-19th century Americans. What makes this vignette so instructive in the classroom is the familiarity most students have with all elements of the story except the bloodletting procedure. Modern readers will respond to the humor and recognize enough of the common elements of life at that time (the apprentice system of medical education, slavery, the country town and the plantation) to understand fully this scene described in "Cupping on the Sternum:"



A kit containing scarifiers and cupping devices.



Patients undergoing cupping and scarifiers.

*Cupping on the Sternum**

I had been a student of medicine about three weeks and had got as far as cupping, cathartics, and castor oil in the noble science of physic, when, as I was sitting in the office investigating by induction the medicinal properties of a jar of tamarinds, I received a note from my preceptor which ran thus:

Mr. L.—You will please take the large cups and scarificator together with a large blister up to Mr. J., and cup his Negro girl Chaney very freely over the sternum; after you have cupped her, apply the blister over the same, as she has inflammation of the lungs.

In anatomy, the "sternum" is that portion of the osseous system known in common parlance as the "breast bone," but at that time I was ignorant of the fact. I had not studied anatomy, and in my ignorance and simplicity of heart imagined that the doctor wanted her to be cupped and blistered "a posteriori," or in other words, over the "seat," and that he had put "um" to the "stern" in the note merely for sport, or it might have been the Latin termination of the word "stern." Filled with a sense of the delicacy and momentous import of my duty, I provided myself with the necessaries and proceeded to cup Chaney on the *sternum*.

By way of parenthesis, let me create an idea of my patient so that you may appreciate the field of my operation. Just im-

agine a butcher's block five feet long and four feet through at the butt converted into a fat bouncing Negro wench with smaller blocks appended for limbs, and you will have a faint conception of the figure and proportion of the delectable portion of humanity upon whom my curative capabilities were to be exhibited. "How are you today, Chaney?" said I, as entering the cabin of my patient I stood before her.

"Oh, Massa young Doctor," said she, "I does feel 'mazing bad — the mis'ry in my bosom, almost broke my heart; I can scacely perspire." (Re-spire, I suppose she meant, as judging from the big drops which, like ebony beads, chased each other down her gleaming neck, I thought that she perspired beautifully.)

"I am very sorry to hear it, Chaney. The Doctor has sent me up here to cup and blister you, and I hope it will relieve you entirely."

"Well, the Lord's will and the Doctor's be done; this anguished sister be's ready" — and she proceeded to divest her bosom of its concealments, thinking that she had to be cupped over the seat of the pain. But it was a different *seat* than that which my cups were destined to exhaust the atmosphere from.

"Stop, Chaney. I was not told to cup you on the breast, but on the *sternum*, so you'll have to turn over!"

"What!" shrieked she, rising straight up in the bed, a great deal whiter in the face than she had been for many a day. "You cup me on de *starn*! You make de cussed 'cisions in my frame on *dem* parts! Massa young Doctor, *tell* me, for de lub of prostituted 'manity, is you in airnest? Oh no, sartainly, you is just joking — just making 'musement of de 'stresses of dis female!"

"No, Chaney, there is no mistake. The doctor says you must be cupped there, and it must and shall be done, so get ready."

"Oh, Massa Doctor, you must be mistaken — you must indeed! De pain no dere, but in my breast! How cupping dere goin cure pain in de breast, eh? Tell me dat!"

"Well, Chaney, I don't know that I can do that, exactly, but I suppose it will be by sympathy. You know the stern and the bosom are not many feet apart. Anyhow, I am going to cup you there, if I have to call in help, so you had better consent."

Chaney, seeing that there was no retreat, agreed at last to the operation. Click! click! went the scarificator, and amidst the shouts

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of the patient and my awful solicitude for fear I might cut an artery, the "deed was did." But no blood flowed, nothing but grease which trickled out slowly like molasses out of a worm hole. I saw that the cups were too infatuated to draw blood from that quarter. I removed them and applied the blister, and I expect fly ointment was in demand about that time.

When the Doctor returned, after an absence of several hours, he found the patient *entirely relieved*, and a blister drawn with about a tubful of water in its interior. I reckon she used chairs mighty little for a few weeks, and she hated the idea of the operation so bad that she burnt up a brand new dress just because it was *bumbazine* [bombazine] and reminded her by the first

syllable of the *seat* of "Cupping on the Sternum."

Bloodletting, the reader learns, is perfectly acceptable, indeed expected, in the American South by both whites and blacks. The reader also learns much about such incidental matters as racial attitudes, the quality of the medical apprentice system, methods of communication and transportation, and differing values of time as compared to the present. Add descriptions from antebellum domestic medical guides on how to bloodlet and why, and modern day students of the health professions have some historical knowledge with which to understand rather than condemn the medical past.

Medical Humanities Section, East Carolina University
College of Medicine, Greenville, NC 27834.

II: The ABCDE of Neonatal Cardiopulmonary Resuscitation

WALTER C. BOUTWELL, MD
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The resuscitation of the asphyctic newborn is rarely planned. Early and effective intervention is essential to prevent the immediate adverse effects of asphyxia and its associated long-term intellectual impairment.

Birth asphyxia is the second most common cause of death in newborn infants in the USA¹ and accounts for approximately eight percent of all neonatal deaths in Oklahoma.^{2,3} Although most perinatal events leading to perinatal asphyxia can be prevented, rapid and appropriate delivery room resuscitation can salvage many infants and reduce or eliminate neurologic sequelae or intellectual impairment. This article presents an overview of the diagnosis and immediate management of asphyxia at birth. Future articles in this series will focus on specific resuscitation techniques

and will expound on the management of disorders causing neonatal asphyxia.

The Asphyxiated Newborn: Pathophysiologic Considerations

Resuscitation of the asphyxiated newborn cannot be performed according to a rote formula, but rather requires a basic understanding of the pathophysiology of asphyxia. Although inadequate oxygenation and/or insufficient blood flow to the Central Nervous System (CNS) and heart in the newborn may begin at variable periods before delivery, they occur most commonly during the intrapartum and immediate postpartum periods. The resulting compromise in CNS and cardiac functions are clinically expressed as apnea and/or bradycardia (or even cardiac arrest). Apnea is by far the most common initial manifestation of birth asphyxia.

The response to asphyxia has been studied in the newborn monkey.⁴ After brief gasping efforts, a period termed *primary apnea* ensues. This is followed by renewed gasping movements for a few minutes. Suddenly breathing stops and the animal lapses into a period of secondary or terminal apnea which persists until death ensues unless artificial ventilation is instituted. The translation of these experimental data into clinical practice has great practical value. Depressed infants who are in the period of primary apnea respond to almost any kind of stimulation. Those infants suffering from secondary apnea require artificial ventilation by endotracheal tube. At birth,

primary apnea is associated with a heart rate of 100 per minute or above, palpable pulses and mild acidosis. A drop in heart rate and blood pressure and moderate to severe acidosis occur during secondary apnea.

Basics of Neonatal Resuscitation

Bearing in mind the need to distinguish between primary and secondary apnea, therapeutic interventions can be prioritized (ABCDE) as follows:

Securing a patent **Airway**

Establishing a normal **Breathing** pattern

Insuring an adequate **Circulation**

Using certain **Drugs** (if needed)

Evaluating the infant

Essential Equipment (modified from recommendations by the American Academy of Pediatrics)⁵

- Small bag and mask with pressure gauge and control
- Pencil handle laryngoscope with premature size blades
- Wall clock
- Cole endotracheal tubes (10, 12, and 14 Fr. or 2.5, 3, and 3.5/mm) with malleable stylet
- Infant size stethoscope
- Suction equipment: bulb syringe, DeLee suction tray and suction apparatus, suction catheters sizes 5 and 8.
- Overhead radiant heater
- A source of oxygen, compressed air, and an oxygen/air blender.
- Adequate lighting
- Umbilical vessel catheterization equipment
- Ultrasound blood pressure monitor with neonatal size cuffs.

AIRWAY

Immediately after delivery, the infant's mouth and nose are suctioned briefly with a bulb syringe. The infant is then placed on his right side and rapidly dried to avoid excessive evaporative heat losses. Suction should be available at all deliveries, but frequently a DeLee trap is all that is required. Prolonged suctioning should be avoided as it may cause apnea, vomiting, and cardiac arrhythmias.⁶ Infants born with thick or particulate meconium require hypopharyngeal suction with a DeLee

suction catheter as soon as the head is delivered; laryngoscopy immediately follows before respirations are stimulated. If thick meconium is seen at the level of the vocal cords, the endotracheal tube should be used as a suction catheter to clear the major airways. Suction can be applied to the endotracheal tube directly by mouth (protected with a mask) or through a low pressure suction device. A more detailed discussion of meconium staining and its management will be presented in a later article.

BREATHING

Lack of respiratory efforts in the first 30 seconds of life with a heart rate of over 100 beats per minute constitute *prima facie* evidence of primary apnea. Usually tactile or mildly painful stimuli such as flicking the infant's heels triggers the initiation of breathing. If this procedure is ineffective, bag and mask ventilation should be used. Inflating pressures should not exceed 25-35 cm of water. The adequacy of ventilation can be assessed by observing chest wall motion and by listening for breath sounds. Inability to adequately ventilate the lungs requires immediate endotracheal intubation.

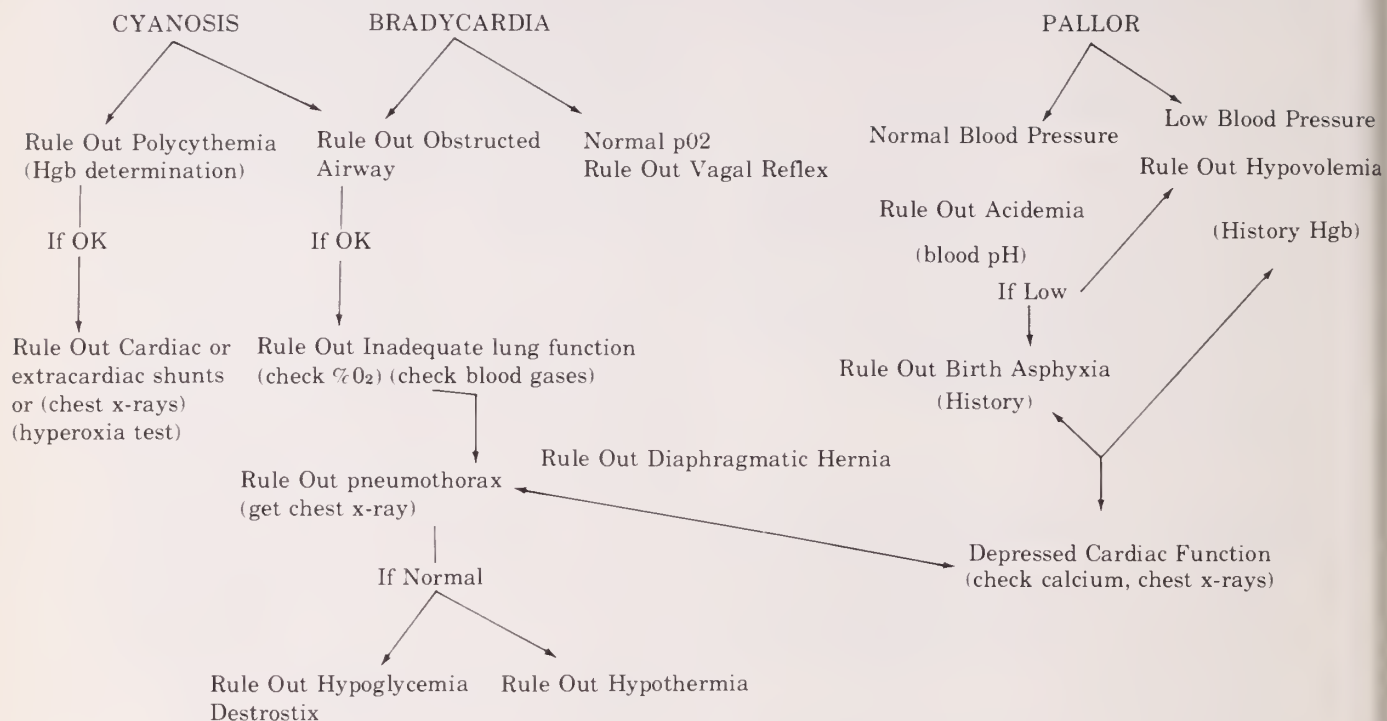
CIRCULATION

When the heart rate decreases to less than 60 beats per minute and the infant does not

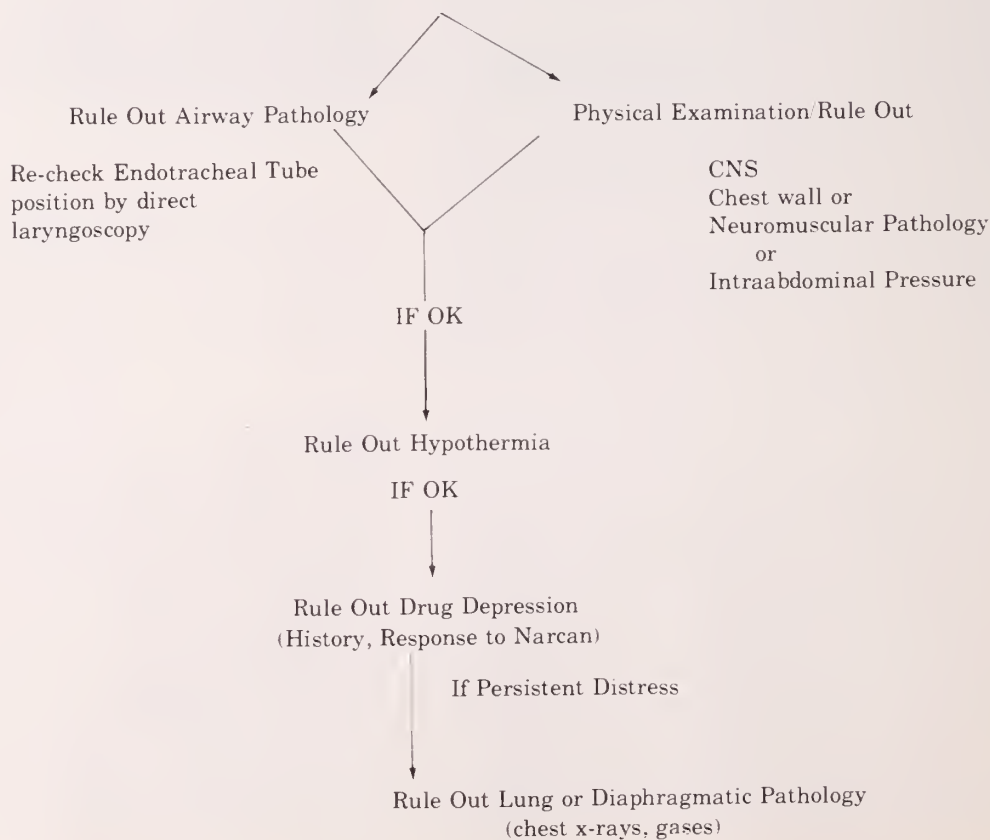


Figure 1

Figure 2



RESPIRATORY DISTRESS



respond to adequate blood oxygenation, cardiac massage must be instituted. The two thumb Thaler method (Figure 1) is recommended at a rate of approximately 100 compressions per minute, with a slight pause after every third compression to allow for an artificial ventilation. Timing should be controlled by the rate of cardiac compressions which should be even, "metronome-like", and should not be interrupted unless expressly needed to permit assessment of the status of cardiac function. Cardiac massage should be discontinued when the heart rate reaches 100 beats per minute and palpable pulses return.

DRUGS AND BLOOD VOLUME EXPANDERS

Sodium bicarbonate is not indicated for the treatment of respiratory acidosis. Mild-to-moderate metabolic acidosis does not usually require alkali therapy if the infant has a normal breathing pattern or is adequately ventilated. Whenever cardiac massage is necessary, however, metabolic acidosis can be presumed to be severe and sodium bicarbonate should be administered. Monitoring of blood acid base balance is important particularly in very low birth weight infants. Metabolic acidosis should be treated initially with 2.0 mEq/k of sodium bicarbonate (0.5 mEq/cc concentration) over a two-minute period. Too rapid an infusion may produce intracranial hemorrhage. Blood gases analysis will monitor the need for further alkali therapy.

If bradycardia persists, especially if associated with hypotension, epinephrine (0.1 cc/k of 1:10,000 dilution) should be given via a central vessel whenever possible, or by intracardiac injection. These doses may be repeated after 5-to-10 minutes if bradycardia persists. The possibility of hypovolemia should be entertained in all severely asphyxiated infants. Blood pressure determinations by direct transducer measurements or by the more frequently available Doppler technique are important in making the diagnosis and monitoring therapy. Blood volume expansion can be achieved by infusing 15 ml/k of O negative blood (crossmatched against the mother), five percent albumisol or plasmanate. Repeat infusions may be needed. Naloxone hydrochloride (Narcan Neonatal) can be used for the treatment of narcotic-induced respiratory depression. The recommended dose of naloxone hydrochloride is 0.01 mg/k. This dose may be repeated every few minutes. Naloxone overdose

should be avoided because this drug blocks the physiologic effects of endogenous opioid substances (eg endorphins). Evidence of the protective role of endorphins against fetal distress and asphyxia is mounting.⁷

Evaluation

When an asphyxiatic newborn fails to respond to appropriate resuscitation efforts, the clinician must reevaluate all that he has done (or presumed to have done) and search for unexpected conditions. Persistence of four cardinal signs (bradycardia, cyanosis, pallor, and respiratory distress) after initial stabilization, securing of an open airway, and adequate ventilation should alert the physician to begin the reevaluation of the infant. Figure 2 depicts common conditions associated with the above-mentioned cardinal signs.

Common Pitfalls in Neonatal Cardiopulmonary Resuscitation

1. Failure to provide an optimal environment allowing cold exposure
2. Neck hyperextension when attempting endotracheal intubation
3. Failure to clear major airways of particulate meconium
4. Ineffective artificial ventilation
5. Inappropriate cardiac massage
6. Failure to correct metabolic acidosis
7. Failure to recognize and correct hypovolemia
8. Failure to prevent hypoglycemia or to supply intravenous glucose to severely asphyxiated infants.
9. Failure to obtain chest radiographs when indicated.
10. Failure to document timing and dosage of drugs given during resuscitations.

CONCLUSION

The resuscitation of the depressed newborn in the delivery room requires team effort to obtain optimal results.

In many hospitals the physician and nurses attending a delivery are usually the only health professionals available to resuscitate an asphyxiated newborn. Standardization and periodic review of procedures is needed to insure success. The role and responsibility of each member of the resuscitation team should be clearly defined in each individual hospital.

All members of the resuscitation team must be thoroughly familiar with all the necessary equipment. The equipment should be frequently checked and be within easy reach. Ancillary personnel (eg laboratory and x-ray technicians) should be readily available. The scope, availability, and level of training of neonatal cardiopulmonary resuscitation teams should be comparable to that of adult resuscitation teams.

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News From The Oklahoma State Department of Health

According to data from live birth certificates, the quality of prenatal care that Oklahoma women receive varies widely according to age, race, schooling, and marital status. The state health department's criteria for "adequate" care is that care which begins in the first trimester and consists of a least ten visits.

Fifty percent of Oklahoma's pregnant women do not receive "adequate" prenatal care, and if a woman is young, unmarried, poorly educated, or a minority, her chances of receiving this critical care are even further reduced. Differences in level of care are most evident according to education and marital status. A white married woman with some college is almost four times as likely to receive adequate care than one who is unmarried with less than nine years of schooling. Almost ten percent of the less educated, unmarried group, receives no care at all, while considerably less than one

percent of the educated group falls into that category.

Race and age also showed some marked differences. Whites are one and one-half times more likely to receive "adequate" care than Indians and blacks. These minorities are twice as likely to have received no care at all. For all races, women age 20 or above are one and one-half times more likely to receive "adequate" care as those under that age. One surprising statistic shows that in spite of the increased risks in pregnancy due to age, the number of women receiving "adequate" care decreases in the over 34 age group.

An analysis of a smaller sample has also demonstrated that chances for delivering low birth weight babies are doubled when a patient has no prenatal care; if care is not begun until the third trimester; or if the care involved is less than four visits. □

COMMUNICABLE DISEASES IN OKLAHOMA FOR APRIL, 1982

DISEASE	APRIL 1982	APRIL 1981	MARCH 1982	Total To Date	
				1982	1981
Amebiasis	2	—	1	5	2
Aseptic Meningitis	8	2	3	18	12
Brucellosis	1	—	—	2	1
Encephalitis, Infectious	2	4	—	7	10
Gonorrhea (Use Form ODH-228)	1240	1305	1495	5134	4824
Hepatitis A	71	21	57	196	92
Hepatitis B	30	18	20	82	70
Hepatitis Unspecified	18	20	18	78	60
Malaria	—	—	—	—	2
Measles (Rubeola)	—	2	—	—	5
Meningococcal Infections	1	6	2	9	22
Pertussis	—	—	1	2	1
Rabies (Animal)	28	17	25	77	62
Rocky Mountain Spotted Fever	3	5	—	3	5
Rubella	1	—	—	2	—
Salmonellosis	22	23	10	57	86
Shigellosis	15	20	18	97	57
Syphilis (Use Form ODH-228)	19	24	16	65	70
Tetanus	—	—	—	—	—
Tuberculosis	28	22	25	119	94
Tularemia	1	1	1	2	2
Typhoid Fever	—	—	—	3	4



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Cutlass/Regal	247.00 per month	Mercedes, 240 Diesel	424.61 per month
Riviera	377.00 per month	Cadillac Eldorado	458.29 per month
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August 17	Medical Office Management	Bartlesville
August 19	Medical Office Management	Tulsa
August 26	Medical Office Management	Lawton
August 31	Medical Office Management	Muskogee
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Annual Meeting Highlights

ANNUAL MEETING HIGHLIGHTS OKLAHOMA CITY, MAY 5-8, 1982

SOME OF THE MOST controversial issues facing organized medicine were debated by Oklahoma physicians at the 1982 OSMA Annual Meeting held May 5-8 in Oklahoma City.

The scientific program debates covered a broad range of controversies, including the teenage pregnancy epidemic in Oklahoma, the treatment of coronary artery disease and life-threatening obesity, the utility of hospital-based trauma centers, and the right of management to exclude women from hazardous occupations.

The debates took place Friday and Saturday, May 7 and 8, in the ballroom of the Skirvin Plaza Hotel. Once the debaters had staked out their positions, they fielded questions from the physicians and media representatives in the audience.

Several guest speakers from outside the association were invited to give their views on controversial issues. They included attorney Robert C. Margo, who spoke on informed consent; Dr Grace Ketterman, of Kansas City, Missouri, who

discussed the teenage pregnancy problem; Representative Cleta Deatherage, who debated the legality of excluding women from hazardous occupations; and Dr Joseph Giordano, head of the George Washington University Hospital trauma team, who discussed the utility of trauma centers in treating victims of trauma.

The scientific debates drew considerable attention from the news media. Both the Oklahoma City and Tulsa newspapers carried reports on some of the sessions, while local television and radio stations conducted interviews with program participants. American Cablevision of Midwest City taped several of the debates for later broadcast. □

GOVERNOR'S ADDRESS

Oklahoma Governor George Nigh discussed Oklahoma's prosperous economy and efforts by the state to improve health care delivery in an address to the opening

Governor George Nigh (left) and OSMA Executive Director David Bickham give a show of good cheer following the governor's address to the House of Delegates.



session of the OSMA House of Delegates.

Nigh noted that the state is at its highest economic level in history. He cited the continuing influx of people into the state as evidence of "a reverse Grapes of Wrath."

"In its seventy-fifth year of statehood, Oklahoma is the most fully employed state in the nation," Nigh said. "When states like Michigan are looking at a billion-dollar deficit, Oklahoma is looking at a \$350 million surplus."

The governor mentioned several ways in which the state is working to improve health care delivery. He cited the state's support of the University of Oklahoma Health Sciences Center and the Oklahoma State Health Department, along with efforts to upgrade the teaching hospitals and requests for increased appropriations for the Physician Manpower Training Commission. Nigh said the state

also is encouraging the private development of community mental health centers.

Nigh summed up his number one priority as "continued economic development of the state so we can support other programs that are someone else's number one priority." □

WESTERN PARTY

The annual meeting Western Party held at Henson's Saloone & Restaurant drew an overflow crowd of physicians, spouses, and guests who dined on western barbecue and listened to the pounding rhythms of singer Rick Nelson and his band.

There were western boots, hats, and jeans galore among the crowd of western



Left: Rick Nelson, the featured performer at the Western Party, opens with "Hello, Mary Lou," one of his most well-known hits.



Right: Dr. James Funnell, annual meeting chairman, and Betty Edge, newly elected president of the OSMA Auxiliary, relax at a Board of Trustees reception.

Below: The Western Party crowd at Henson's included (left to right) Dr. Michael Haugh, new vice-chairman of the Board of Trustees; Jack Spears, executive director of the Tulsa County Medical Society; Dr. Floyd Miller, OSMA past-president, and his wife, Adeline Miller.



Dr James Pitts (left), outgoing OSMA president, and Dr John McIntyre, incoming OSMA president, await the beginning of the Western Party show.



partygoers. "Marshal" James Pitts, MD, even wore his lawman's star in case the saloon crowd got a little rowdy.

The buffet dinner and a session of western dance instruction preceded the show. Nelson and his band performed for nearly an hour, mixing early hits like "Travelin' Man" and "Hello, Mary Lou" with more recent chart-climbers such as "Don't Look Back."

Partygoers were shuttled to and from Henson's by a double-decker bus, compliments of television station KTVY. □

PRESIDENTS COME AND GO

The Saturday night Presidential Inaugural Banquet and Ball was the final, dazzling event of the 1982 annual meeting. Hosted by Dr James Funnell, annual meeting chairman, the evening honored outgoing OSMA President James B. Pitts, MD, and incoming OSMA President John A. McIntyre, MD.

Humorist Joe Griffith entertained the banquet crowd with a repertoire of amusing stories, many of them targeting the medical profession. The appreciative laughter and applause showed that doctors, too, have funnybones.

The banquet was followed by dancing to the big band sound of the Central State University Jazz Ensemble, directed by Kent Kidwell. □

Sherry Strebel, outgoing OSMA Auxiliary president, presents Dr Charles McCall, dean of the University of Oklahoma College of Medicine, with a check from the AMA-ERF for funds donated by the county auxiliaries. Checks also went to the Tulsa Medical College and the Oral Roberts University College of Medicine.



OSMA 1982-83 OFFICERS

The OSMA House of Delegates and Board of Trustees elected the following officers to serve the association during 1982-83:

President — John A. McIntyre, MD, of Enid

President-elect — George H. Kamp, MD, of Tulsa

Vice-president — James B. Eskridge III, MD, of Oklahoma City

Secretary-treasurer — Armond H. Start, MD, of Oklahoma City

Speaker of the House — Larry L. Long, MD, of Oklahoma City

Vice-speaker of the House — Robert G. Perryman, MD, of Tulsa

Chairman of the Board of Trustees — Kent Braden, MD, of Oklahoma City

Vice-chairman of the Board of Trustees — Michael J. Haugh, MD, of Tulsa □

Right: Dr George Kamp (center), OSMA's new president-elect, raises his hand to make a point during a regular session of the Board of Trustees. Flanking him are (left) Dr Kent Braden, and (right) Dr Richard Liebendorfer



SPORTS SPOTLIGHT

Physician competition may be a touchy subject in some medical circles, but it was the order of the day at the annual meeting golf and tennis tournaments. The golf tournament was played Friday, May 7, at Kicking Bird Golf Course in Edmond. The tennis tournament, which was played both Friday and Saturday, took place at the Summerfield Racquet Club in Oklahoma City.

In the golf tournament, low gross winners were Dr William C. McCurdy III, Norman, first place, and Dr Raymond O. Smith, Oklahoma City, second place. Low net winners were Dr Fenton M. Sanger, Oklahoma City, first place, and Dr Leon D. Combs, Shawnee, second place.

In the women's tennis tournament, first place honors went to Ann Hughes, Oklahoma City, and second place went to Joan McCampbell, Oklahoma City. In the men's tennis tournament, first place winners for men's doubles were Dr David D. Snyder, Oklahoma City, and Dr Lee Ison, Midwest City. Second place winners were Dr Farris W. Coggins, Oklahoma City, and Dr Kenneth P. Coffey, Okmulgee.

The men's singles event could not be completed in the time allotted and is to be continued. The leading contenders in the event are Dr Kenneth P. Coffey and Dr Larry K. Killebrew, Edmond. □



Left: Dr Elvin Amen (center), outgoing chairman of the OSMA Board of Trustees, joins Dr Kent Braden, newly elected chairman of the board, and his wife, Dr Barbara Braden.

EDITOR REAPPOINTED

Mark R. Johnson, MD, was reappointed editor-in-chief of the *OSMA Journal* by the association's Board of Trustees. The appointment was made during the 1982 OSMA Annual Meeting.

Dr Johnson was first named editor of the *Journal* in 1968. Since that time he has received national attention for his outspoken and sometimes controversial editorials. He also has been recognized for the journalistic achievements of the *Journal* during his tenure as editor. The board's vote to reappoint Dr Johnson was unanimous. □

Right, Dr William Miller (left) accepts the Sandoz Medical Journalism award from Dr Mark R. Johnson, editor-in-chief of the *OSMA Journal*.



AND THE WINNER IS...

Annual meeting time is also OSMA awards time, and this year was no exception. Honorees, both lay and professional, were recognized for their contributions to organized medicine.

The OSMA Outstanding Layman Award went to former US Senator Henry Bellmon for his legislative activities and support of the medical profession. Runner-up for the award, emergency medical technician Dennis Dukes, of Prague, will receive a certificate of appreciation from OSMA.

Below, Dr Jean Pitts, winner of the Charlotte Leebron Memorial Trust award, expresses her thanks to association members. Behind her is Dr William Leebron, who presented the award.

Co-winners of the A.H. Robins Award were James B. Pitts, MD, immediate past-president of OSMA, and Malcom E. Phelps, MD, an OSMA Life Member who has served both state and national medical organizations with distinction. The Robins award recognizes significant accomplishments in the medical profession and in civic and community activities.

Two association members were recognized for their contributions to medical journalism. Jean Pitts, MD, received the Charlotte S. Leebron Memorial Trust award for her article "Percutaneous Transluminal Angioplasty and Recanalization in the Treatment of Peripheral Vascular Disease," published in the April 1981 *OSMA Journal*. The Sandoz Medical Journalism award went to William A. Miller, MD, for his article "Postoperative Wound Infection in Orthopedic Surgery," published in the November 1981 *Journal*.

Recognition also was given to the late Roy Cook Lytle, Esq., general counsel of the association for more than thirty years. The OSMA House of Delegates passed a memorial resolution expressing appreciation for the distinguished services and contributions of Mr Lytle to the physicians and citizens of the state of Oklahoma. Mr Lytle died March 19 at the age of 79. □



INFORMATIVE EXHIBITS

Exhibitors at this year's annual meeting represented not-for-profit, educational organizations. Located just outside the ballroom where the scientific program was being conducted, the exhibits supplied physicians with information about the individual organizations as well as about the medical interests they represent. Exhibitors included:

- American Association of Medical Assistants, Inc.
- American Cancer Society
- American Heart Association, Oklahoma Affiliate
- American Lung Association of Oklahoma
- Central Oklahoma Ambulance Trust, AMCARE
- Kidney Foundation
- Lupus Association
- Oklahoma Dietetic Association
- Oklahoma Foundation for Epilepsy
- Oklahoma Medical Political Action Committee
- Ostomy Association
- PLICO Health
- United Cerebral Palsy
- Wilson Agency



Get Set For Tulsa '83

It's not too soon to begin thinking about next year's annual meeting. The meeting is set for May 4-7, 1983, at the luxurious Excelsior Hotel in Tulsa. Plans call for a full schedule of professional and social activities, complemented by the annual sports tournaments and selected special events. Twenty-six specialty societies have been invited to schedule meetings in conjunction with the OSMA annual meeting, and, to date, one-third have accepted. Participation by the specialty societies is expected to broaden the annual meeting's appeal to better suit the professional needs of all OSMA members. The Annual Meeting Planning Committee is set to begin its deliberations soon on program content and physical arrangements. The planning process will be guided by Dr Tex Goen, Sr., of Tulsa, 1983 annual meeting chairman.



Members of the American Association of Medical Assistants who attended their services to A during the annual meeting included (left to right) Antrim (CMA-AC), La Craig, Ann Marie Lowe, Louise Kunkel, Heidelberg, Connie Acree, and Donna Brown.

After Annual meeting exhibits included this informative display from Anonymous and the of-a-kind Emergency Unit, at left, used Kidney Foundation to donated organs and keep them alive and functioning.

er right: Glo Henley, easurer of OMPAC, he name of Dr Jack as the winner of an Man game. OMPAC Chairman Dr William accepts the winning entry.

Deaths

LOYD G. WILLIAMS, MD
1931-1982

Wetumka family physician, Loyd G. Williams, MD, died May 15, 1982. Doctor Williams, 50, was a native of Leedey, Oklahoma and was graduated from the University of Tennessee School of Medicine in 1956. His practice was established in Wetumka in 1958. He was active in civic affairs in his community and was a member of the American Academy of Family Physicians. He was a member of the Admissions Board for the University of Oklahoma College of Medicine. □

In Memoriam

1981

Orville C. Armstrong, MD

July 9

Charles F. Paramore, MD

July 10

James D. Reynard, MD

July 21

Mark R. Everett, PhD

August 17

Khalil Ahmad, MD

August 22

M. H. Haskell, MD

August 30

C. F. Foster, Jr., MD

October 11

E. E. Shircliff, MD

October 23

S. N. Stone, Jr., MD

November 9

James R. Barnes, MD

December 13

E. Rankin Denny, MD

December 16

John P. Grimes, MD

December 24

1982

Frances P. Newlin, MD

February 16

James T. Maddox, MD

February 21

Joseph F. Messenbaugh, MD

March 12

Boyd Vance Lucas, MD

April 9

Carlton E. Smith, MD

April 23

Ella H. Murray, MD

May 3

Loyd G. Williams, MD

May 15

□

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Physicians are high-achieving professional breadwinners and can be compared to "money machines". But, they are also human beings, who because of their profession, have a greater than average understanding of the prospects of unexpected accidents and illnesses which can impair or destroy their income producing ability.

Through the Oklahoma State Medical Association Group Disability Program, you have the opportunity to obtain assurance of uninterrupted income if your health should fail.

Three plans are available. Plan L-65 pays accident benefits for lifetime. Sickness benefits are payable to age 65, or for a 2-year maximum period if disability begins between ages 63 and 70. Benefits are payable for 10 years based on being unable to perform every duty of your occupation, thereafter, based on being unable to perform the duties of any gainful occupation for which you are reasonably fitted.

Semi Annual Premium — Benefit payable after 8 days for sickness, first day for accidents

Plan L-65	WEEKLY INDEMNITY	UNDER AGE 30	AGE 30-39	AGE 40-49	AGE 50-59	AGE 60-69
	\$500.00	\$301.50	\$346.50	\$476.50	\$641.50	\$418.50*
	400.00	241.50	277.50	381.50	513.50	418.50*
	300.00	181.50	208.50	286.50	385.50	418.50
	200.00	121.50	139.50	191.50	257.50	279.50
	100.00	61.50	70.50	96.50	129.50	140.50

For full particulars, contact JANE GRIFFITH



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Miscellaneous Advertisements

GENERAL SURGEON, BOARD CERTIFIED, 34, broadly trained all fields, desires position near Tulsa or Oklahoma City. Partnership or group preferred. Completing military obligation and available June, 1983. Reply Key H, The Journal, Oklahoma State Medical Association, 601 NW Expressway, Oklahoma City, OK 73118, for CV and details.

MD, FAMILY PRACTICE, MINOR EMERGENCY CLINIC in South Oklahoma City is now accepting applications. No night call., competitive salary with profit sharing. Paid malpractice, BC/BS. Please call Linda at (405) 631-3636 for appointment with Medical Director.

PEDIATRICIAN SEEKS SOLO, GROUP OR PARTNERSHIP PRACTICE in or around

Oklahoma City. Could assume active practice for consideration: Contact Key P, The Journal, Oklahoma State Medical Association, 601 NW Expressway, Oklahoma City, OK 73118.

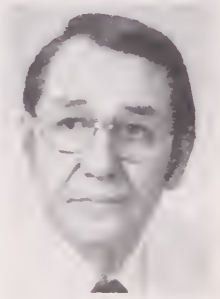
GE X-RAY MACHINE, 100 milliamp, all accessories included. \$2,500. You move. Call Paul L. Masters, MD, 677-4048.

INTERNIST, PULMONOLOGIST, FLEX. Board certified, ABIM and pulmonary medicine. Seeking solo, group or partnership in any location. Willing to do some internal medicine. Available July, 1982. Contact: K. Shah, MD, 44-36 Ketcham Street, Elmhurst, New York 11373. (212) 426-2231 or (212) 240-1209. ☐

REMARKS OF THE PRESIDENT to the OSMA House of Delegates

Mr Speaker, Dr McIntyre, Dr Amen, Dr Perryman, Fellow Delegates and Guests:

Things are in a different perspective today. Last year I told you how, as President-Elect, I got to see copies of all the outgoing correspondence. Most of the time I didn't know what the question was, but I knew all the answers. This year I got all the questions but didn't know any of the answers. Whether or not that balances, I'm not sure.



It has been a real pleasure to serve as President of OSMA. I've heard every Past President make that comment. Now I know why they say it. You probably think it's because this job is a lot of fun, but the truth of the matter is that David Bickham writes it in these speeches.

Truthfully, though, it has been a lot of fun. Doctors aren't noted for their humor, except me, but it's been a real experience to travel and visit with physicians all over the state and to watch and help as they work on common problems and find workable solutions. Now that's fun!

Speaking of humor, you've probably heard the story of the long-faced doctor who went in the bar for a drink. He sat down, was served and for the next 15 to 20 minutes didn't say a word or even acknowledge that there was anyone in the place. Finally the bartender came over and said, "Sir, you'll have to leave. Happy Hour starts in five minutes."

To say that there are no problems in organized medicine would be a gross understatement. But there are a lot of good things, too. Things that happened because good doctors worked together to make things happen and happen for the better. PLICO is one good example. Association members joined together, pooled their resources, worked hard and we now have a strong, successful insurance company, one of the largest in the State, protecting us for one of the lowest premiums in the coun-

try; PLICO Health already has 1 out of 2 physicians in the State enrolled. We have a policy that was written by doctors and a plan that is administered by doctors; Our public reputation is still high. Our patients feel good about our services and we are able to render better medical care than ever before;

Despite innumerable attempts to change, we still practice medicine in a "free enterprise" environment, not nearly so fettered as most of our foreign colleagues;

Our Association is strong, not fragmented, and we have excellent participation from our most talented members;

The AMA, our national representative, has provided us the umbrella under which we deal with the big issues, and we do it well; For the first time in a long while Congress is talking about repealing laws instead of passing them. It appears that Health Planning and PSRO will either go or be seriously curtailed. We see fewer and fewer regulations.

So I'll repeat, it has been a pleasure and really a lot of fun being your President during these changing times.

I have taken my share of ribbing because of my style of travel. Most of you know I don't fly. Doris and I go everywhere by car. You have to plan a little further in advance, but I still got to most of the places we needed to be — Las Vegas, Chicago, Washington DC and other places, too. Invariably someone would joke about not flying, "What's the matter, are you afraid the plane will fall?" Or similar such quips — Well, I want all of you to know — I've never been afraid of flying, and I'm not afraid of the plane falling, I'm just worried about what happens when the damn thing hits the ground!

Seriously, it's been a gratifying year. I've enjoyed the good times and the bad, and John, there are some of both. John McIntyre is a good and capable leader and I know the Association will be in good hands when he assumes the Presidency. Thank you for your help, your courtesy, your support and your friendship. I encourage you to pass it on to your new President.

REMARKS OF THE PRESIDENT-ELECT to the OSMA House of Delegates

Mr Speaker, Dr Pitts, Members of the House of Delegates:

I am deeply honored to have been elected your President for the coming year. My close association with the leadership and members of this organization over the years has induced a love affair which has become very dear to me and has been a source of great satisfaction in my professional life. Although secondary to my medical practice, these activities have broadened my life and philosophy to a marked degree, and will continue to do so. I pledge to you my continuing efforts to foster the philosophies and goals of this organization to the best of my abilities.

The House of Delegates and the Board of Trustees hold in their hands the future of medical practice in Oklahoma to a considerable degree. As the originator of policy for the state association *you* are the grassroots for your officers and board, with the invaluable assistance of the various councils, and must there-



fore be ever alert, vigilant, innovative, and persistent to continue to control the quality, efficiency and availability of medical care in our state. The apparent emerging transfer of emphasis for cost control to private enterprise and thus to the medical profession offers a greater opportunity to use our knowledge, concern, and knowhow to advantage, and to a more receptive and attentive audience.

All those engaged in the activities of the OSMA spend long hours away from their practice, in consideration of the various problems confronting us, and experience has shown their decisions to be almost 100% correct. These long hours away from home, family and practice are sometimes frustrating, and we often wonder if they are worthwhile. We only need to look at the accomplishments of our organization to know that they are worthwhile, and thus to renew our satisfactions from our endeavors.

I am very proud of this organization, and with your help and devotion, your new administration proposes to carry on with newly dedicated purpose to further the goals and ideals of the Oklahoma State Medical Association.

Proceedings of the 76th Annual Session of the House of Delegates of the Oklahoma State Medical Association

OPENING SESSION

I. CALL TO ORDER:

The House of Delegates convened its 76th Annual Session in the Skirvin Plaza Hotel, Oklahoma City, Oklahoma, on May 6, 1982. The Speaker, Larry Long, MD, Oklahoma City, called the meeting to order at 10:10 AM.

II. INVOCATION:

The invocation was delivered by Edwin E. Rice, MD, Oklahoma City, past president of the Oklahoma County Medical Society.

III. REPORT OF THE CREDENTIALS COMMITTEE:

The presence of a quorum was reported by Lanny F. Trotter, MD, Stillwater, Chairman of the Credentials Committee.

IV. INTRODUCTION OF SPECIAL GUESTS:

Doctor Long introduced James B. Pitts, MD, Oklahoma City, President of the Oklahoma State Medical Association. Doctor Pitts then introduced Governor George Nigh, who welcomed the delegates and spoke concerning how well Oklahoma is doing at the present time.

V. PRESENTATIONS:

At this time, Mrs Sherry Strebel, President of the Oklahoma Auxiliary was introduced. Mrs Strebel gave a report on how well the Auxiliary is doing and how much the membership is increasing. She then introduced Kay Reardon of Virginia. Mrs Reardon is Southern Medical Auxiliary Vice-president and Regional Vice-president of the AMA Auxiliary. Mrs Strebel then introduced Mrs Betty Edge, incoming president of the Auxiliary. Mrs Edge spoke to the delegates asking them to encourage their wives to become involved in the Auxiliary. She stated that the Oklahoma Auxiliary had given \$9,500 this year to nurse education.

At this time, Mrs Strebel introduced Mrs Maureen Bynum, Oklahoma State Chairman of the AMA-ERF. The AMA-ERF fund checks were then presented by Mrs Strebel. A check in the amount of \$20,201.52 was presented to Charles McCall, MD, Dean of the University of Oklahoma Medical College. A check in the

amount of \$526.00 was presented to Ed Tomsovic, MD, Dean of the University of Oklahoma Tulsa Medical College. A check in the amount of \$1,034.00 will be presented to Oral Roberts University. A representative of that University was unable to attend the Opening Session of the House of Delegates.

William Leebron, MD, Elk City, past president of the OSMA, presented the Charlotte S. Leebron Memorial Award for the best scientific paper at this time. Jean Pitts, MD, Oklahoma City, was the recipient of this honored award. Doctor Pitts was selected by the *Journal* Board and Mark R. Johnson, MD, Editor-in-Chief of the *Journal*.

VI. REMARKS OF THE SPEAKER:

Doctor Long introduced Elvin M. Amen, MD, Chairman of the Board of Trustees; James B. Pitts, MD, President of the OSMA; Robert Perryman, MD, Vice-speaker of the Board of Trustees, and John McIntyre, MD, President-elect of the OSMA.

Doctor Long introduced staff members David Bickham, Executive Director of OSMA; Kathy Musson and Susan Meeks, Recording Secretaries from OSMA. He then introduced Kent Braden, MD, Oklahoma City, new Chairman of the Board of Trustees and Michael T. Haugh, MD, Tulsa, new Vice-chairman of the Board of Trustees.

Bud Wright, a special guest, was introduced. Mr Wright is Associate Director of the Department of Society Relations from the AMA in Chicago.

Doctor Long appointed the following committees to assist in the conduct of the meeting:

REFERENCE COMMITTEE I

Michael J. Haugh, MD, Tulsa, Chairman
Ronald C. Elkins, MD, Oklahoma City
John C. Glasgow, MD, Altus
Charles M. Harvey, MD, Oklahoma City
F. J. Lashley, Jr., MD, Walters
Leo Meece, MD, Woodward
John Bullen, MD, Hydro
Milton R. Workman, MD, Tulsa

REFERENCE COMMITTEE II

Elaine Davis, MD, Enid, Chairman
Elwood Herndon, MD, Oklahoma City

H. Clark Hyde, Jr., MD, Oklahoma City
Joe W. McCauley, MD, McAlester
David A. Ronk, MD, Norman
John Alexander, MD, Tulsa
Tim K. Smalley, MD, Stillwater

REFERENCE COMMITTEE III

Raymond L. Cornelison, Jr., MD, Midwest City, Chairman
Thomas L. Ashcraft, MD, Tulsa
William G. Bernhardt, MD, Midwest City
Harriet J. Coussons, MD, Oklahoma City
Jim D. Dixon, MD, Guthrie
Charles R. Gibson, MD, Chickasha
Michael Z. Rickman, MD, Enid
Boyd O. Whitlock, MD, Tulsa
Richard L. Winters, MD, Poteau

CREDENTIALS COMMITTEE

Lanny F. Trotter, MD, Stillwater, Chairman
Victor L. Robards, Jr., MD, Tulsa
J. B. Eskridge, III, MD, Oklahoma City

TELLERS

Ed L. Calhoon, MD, Beaver, Chairman
James A. Hill, MD, Carnegie
J. M. Mazzolini, MD, Okarche
Felix R. Kay, MD, Midwest City

SERGEANTS-AT-ARMS

Thomas Rhea, MD, Idabel
Kent Braden, MD, Oklahoma City

PARLIAMENTARIAN

John A. McIntyre, MD, Enid

(Doctor Long stated that Floyd Miller, MD, has asked that he be relieved of his responsibilities as Parliamentarian. Therefore, Doctor McIntyre, Incoming President, will serve as Parliamentarian.)

Doctor Long announced that copies of the Constitution and Bylaws were available at the Credentials Committee Desk.

VII. APPROVAL OF THE 1981 ANNUAL MEETING MINUTES:

A motion was made that the minutes of the 1981 Annual Meeting be approved. The motion was seconded and approved.

At this time, a motion was made to recess the House of Delegates for ten minutes. This motion was seconded and approved.

After the House reconvened, several announcements were made regarding the telephone message center number, the OMPAC

Luncheon time and the University of Oklahoma Alumni Banquet. James Funnell, MD, Oklahoma City, made these announcements.

VIII. NOMINATIONS FOR ELECTIONS:

Doctor Long declared the House open for nominations for PRESIDENT-ELECT (one-year term of office).

George H. Kamp, MD, Tulsa, was nominated by Michael Haugh, MD. The nomination was seconded.

There being no other nominations, the nominations were declared closed.

Nominations were declared open for the position of VICE-PRESIDENT (one-year term of office).

James B. Eskridge, III, MD, Oklahoma City, was nominated by Harold Chandler, MD. The motion was seconded.

There being no other nominations, the nominations were declared closed.

Nominations were declared open for the position of SPEAKER, HOUSE OF DELEGATES (two-year term of office).

Larry L. Long, MD, Oklahoma City, was nominated by Hal Vorse, MD. The nomination was seconded.

There being no other nominations, the nominations were declared closed.

Nominations were declared open for the position of VICE-SPEAKER, HOUSE OF DELEGATES (two-year term of office).

Robert Perryman, MD, Tulsa, was nominated by John Hastings, MD. The nomination was seconded.

There being no other nominations, the nominations were declared closed.

Nominations were declared open for the position of DELEGATE TO THE AMA (POSITION II).

Floyd F. Miller, MD, Tulsa, was nominated by Richard A. Liebendorfer, MD. The nomination was seconded.

There being no other nominations, the nominations were declared closed.

Nominations were declared open for the position of DELEGATE TO THE AMA (POSITION III).

M. Joe Crosthwait, MD, Midwest City, was nominated by Raymond L. Cornelison, Jr., MD. The nomination was seconded.

There being no other nominations, the nominations were declared closed.

Nominations were declared open for the position of DELEGATE TO THE AMA (POSITION IV).

Perry Lambird, MD, Oklahoma City, was nominated by *Roland Walters, MD*. The nomination was seconded.

There being no other nominations, the nominations were declared closed.

Nominations were declared open for the position of ALTERNATE DELEGATE TO THE AMA (POSITION I).

William M. Leebron, MD, Elk City, was nominated by *Frank K. Buster, MD*. The nomination was seconded.

There being no other nominations, the nominations were declared closed.

Nominations were declared open for the position of ALTERNATE DELEGATE TO THE AMA (POSITION II).

Orange Welborn, MD, Ada, was nominated by *Clarence Taylor, Jr., MD*. The nomination was seconded.

There being no other nominations, the nominations were declared closed.

Nominations were declared open for the position of ALTERNATE DELEGATE TO THE AMA (POSITION IV).

Victor Robards, Jr., MD, Tulsa, was nominated by *John Alexander, MD*. The nomination was seconded.

There being no other nominations, the nominations were declared closed.

Nominations were declared open for TRUSTEE and ALTERNATE TRUSTEE for the following Trustee Districts (three-year term of office):

DISTRICT I.

Reporting on the caucus of representatives from District I, the following nominations were made:

Hillard Denyer, MD, Bartlesville, was nominated for the position of Trustee. The nomination was seconded.

There being no other nominations, the nominations were declared closed.

Norman Cotner, MD, Grove, was nominated for the position of Alternate Trustee. The nomination was seconded.

There being no other nominations, the nominations were declared closed.

DISTRICT II.

George B. Gathers, MD, Stillwater, was nominated for the position of Trustee. The nomination was seconded.

There being no other nominations, the

nominations were declared closed.

Ron M. Kreger, MD, Ponca City, was nominated for the position of Alternate Trustee. The nomination was seconded.

There being no other nominations, the nominations were declared closed.

DISTRICT III.

Joseph W. Stafford, MD, Enid, was nominated for the position of Trustee. The nomination was seconded.

Theodore H. Fortmann, MD, Okarche, was nominated for the position of Alternate Trustee. The nomination was seconded.

There being no other nominations, the nominations were declared closed.

DISTRICT IV.

Rhonald A. Whiteneck, MD, Woodward, was nominated for the position of Trustee. The nomination was seconded.

There being no other nominations, the nominations were declared closed.

Ed L. Calhoon, MD, Beaver, was nominated for the position of Alternate Trustee. The nomination was seconded.

There being no other nominations, the nominations were declared closed.

DISTRICT V.

William M. Leebron, MD, Elk City, was nominated for the position of Trustee. The nomination was seconded.

There being no other nominations, the nominations were declared closed.

Thomas J. Lowery, MD, Yukon, was nominated for the position of Alternate Trustee. The nomination was seconded.

There being no other nominations, the nominations were declared closed.

X. REPORT OF THE PRESIDENT:

(The President's Report may be found on page 196 of this Journal.)

XI. REPORT OF THE CHAIRMAN OF THE BOARD OF TRUSTEES:

Elvin M. Amen, MD, Chairman of the Board of Trustees, gave an overview of the Board of Trustees meetings. He read his Report to the Board of Trustees and the Supplemental Report. (Copies of the reports are attached.)

XII. REPORT OF THE SECRETARY-TREASURER:

Armond Start, MD, presented the Secretary-Treasurer's Report. He stated that

the OSMA is now in the black approximately \$52,000. We now have 2,861 regular members; 13 affiliate members; 242 life members; 10 hardship members; 403 junior members; and 150 pending memberships, making a total of 3,696 members. There are only 468 physicians in the State of Oklahoma who are not members of OSMA. (Copy of the report is attached.)

XIII. PRESENTATION OF BUSINESS TO COME BEFORE THE HOUSE:

Doctor Long made the announcement that Resolution 16, introduced by C. Alton Brown, MD, had been accepted by the Board of Trustees at their meeting May 5, 1982, as a late resolution to be discussed by Reference Committee I. The Resolution pertains to claims made insurance.

XIV. OTHER BUSINESS:

At this time, Doctor Long gave the chair to Robert Perryman, MD, who read the resolution of commendation for Harlan Thomas, MD, for his services as an Oklahoma Delegate to the American Medical Association. This resolution was introduced by the Tulsa County Medical Society. A motion was made to adopt the resolution. The motion was seconded and the resolution was adopted unanimously.

M. Joe Crosthwait, MD, expressed appreciation to Dr Thomas as an AMA delegate, stating that the AMA delegation is going to miss him.

XV. NECROLOGY REPORT AND MEMORIAL RESOLUTIONS:

Doctor Long presented a Memorial Resolution for Roy C. Lytle, LLB. Mr Lytle served as the Oklahoma State Medical Association's general counsel for more than 30 years.

Doctor Long made a motion that the Memorial Resolution for Roy Lytle be approved. The motion was seconded and the Resolution adopted unanimously.

NECROLOGY REPORT 1981-82

Khalil Ahmad, MD
Orville C. Armstrong, MD
James R. Barnes, MD
E. Rankin Denny, MD
Frederick G. Dorwart, MD
Mark R. Everett, PhD
C. F. Foster, Jr., MD
Roger C. Good, MD
Rufus K. Goodwin, MD

John P. Grimes, MD
M. H. Haskell, MD
Sam W. Hendrix, MD
Joseph W. Kelso, MD
Boyd Vance Lucas, MD
James T. Maddox, MD
Joseph F. Messenbaugh, MD
Ella H. Murray, MD
Frances P. Newlin, MD
Charles F. Paramore, MD
James D. Reynard, MD
E. E. Shircliff, MD
Carlton E. Smith, MD
S. N. Stone, Jr., MD

Will you also pause to remember
Roy C. Lytle, LLB
OSMA Legal Counsel
For Over Thirty Years

XVI. ADJOURNMENT

A motion was made that the House of Delegates adjourn until 11:45 am Saturday, May 8, 1982.

The motion was seconded and approved.
Recorded by Susan Meeks.

CLOSING SESSION

I. CALL TO ORDER:

The Closing Session of the 76th Annual Meeting of the House of Delegates was called to order by the Speaker, Larry Long, MD, Oklahoma City at 12:05 PM in the Skirvin Plaza Hotel, Oklahoma City.

II. INVOCATION:

The invocation was delivered by Sherry Strebel, outgoing President, OSMA Woman's Auxiliary.

III. REPORT OF THE CREDENTIALS COMMITTEE:

Lanny Trotter, MD, Stillwater, announced that a quorum of delegates was present.

Dr Long recognized the following AAMA Members and thanked them for all the help they had given during this year's annual meeting:

Donna Brown, President, Oklahoma Chapter of AAMA, from Ponca City; Ann Marie Schewe from Enid; Sandy Heidelberg, President of the East Central Chapter of the Okla-

homa AAMA, from Muskogee; Billie Acres, President of the Oklahoma City Chapter of AAMA; Louise Kunkel from Enid; Connie Avey, President of the Kay-Noble Chapter of Oklahoma AAMA and Roberta Antrim of Oklahoma City.

IV. ANNUAL PLICO SHARE HOLDERS MEETING:

C. Alton Brown, MD, Oklahoma City, presented the Annual PLICO Report. At the conclusion of the report, he stated that the terms of five of PLICO's Board of Directors were expiring and he recommended reelection of all five. (*Their names are in the election phase of these minutes.*)

V. PRESENTATION OF AWARDS:

Mark R. Johnson, MD, presented the Sandoz Pharmaceutical Award to William A. Miller, MD, Oklahoma City, who was the runner-up for the best scientific paper published in the *OSMA Journal* during the past year. Dr Johnson explained the award to those present.

Floyd Miller, MD, Tulsa, announced that an award had been prepared for Harlan Thomas, MD, Tulsa, for his dedicated service as a Delegate to the American Medical Association. Dr Thomas was not present at the Closing Session and the award will be presented to him at a later date.

Doctor Long announced that Henry Bellmon was the recipient of OSMA's Outstanding Layman's Award. Mr Bellmon was not present at the Closing Session; therefore, the actual award will be presented at a later date.

The recipients of the A. H. Robins Community Service Award were named. The recipients are: James B. Pitts, MD, Oklahoma City, and Malcolm Phelps, MD, El Reno, Oklahoma. The awards will be presented to the two physicians at a later date.

VI. ELECTION OF OFFICERS:

Doctor Long stated that there are no contested races for election this year. Unless there is dissent from the floor, the following nominees are declared elected:

George H. Kamp, MD, Tulsa — PRESIDENT-ELECT

James B. Eskridge, III, MD, Oklahoma City — VICE-PRESIDENT

Larry L. Long, MD, Oklahoma City —

SPEAKER, HOUSE OF DELEGATES

Robert Perryman, MD, Tulsa — AMA DELEGATE (POSITION II)

M. Joe Crosthwait, MD, Midwest City — AMA DELEGATE (POSITION III)

Perry Lambird, MD, Oklahoma City — AMA Delegate (POSITION IV)

William M. Leebron, MD, Elk City — ALTERNATE AMA DELEGATE (POSITION I)

Orange Welborn, MD, Ada — ALTERNATE AMA DELEGATE (POSITION II)

Victor Robards, Jr., MD, Tulsa — ALTERNATE AMA DELEGATE (POSITION IV)

Hillard Denyer, MD, Bartlesville — TRUSTEE — DISTRICT I

Norman Cotner, MD, Grove — ALTERNATE TRUSTEE — DISTRICT I

George B. Gathers, MD, Stillwater — TRUSTEE — DISTRICT II

Ron M. Kreger, MD, Ponca City — ALTERNATE TRUSTEE — DISTRICT II

Joseph W. Stafford, MD, Enid — TRUSTEE — DISTRICT III

Theodore H. Fortmann, MD, Okarche — ALTERNATE TRUSTEE—DISTRICT III

Rhonald A. Whiteneck, MD, Woodward — TRUSTEE — DISTRICT IV

Ed L. Calhoon, MD, Beaver — ALTERNATE TRUSTEE — DISTRICT IV

William M. Leebron, MD, Elk City — TRUSTEE — DISTRICT V

Thomas J. Lowrey, MD, Yukon — ALTERNATE TRUSTEE — DISTRICT V

There was no dissension from the floor and the above slate of officers was elected. Doctor Long congratulated the new officers and trustees and asked them to remain after the House of Delegates Meeting so that pictures could be made.

At this time, the Board of Directors for PLICO was reelected as recommended by C. Alton Brown, MD. The following were reelected:

David Bickham, Executive Director, OSMA
J. B. Eskridge, III, MD
Eugene Fields, MD
William M. Leebron, MD
Marvin K. Margo, MD

VII. REMARKS OF THE PRESIDENT-ELECT:

(A copy of the President-Elect's remarks may be found on page 197 of this *Journal*.)

VIII. REPORT OF THE REFERENCE COMMITTEES:

Doctor Long stated the Report of the Reference Committees would be governed by Roberts Rules of Order. A delegate can speak once for or against a question. Variation from that will be at the Chair's discretion. He asked the Delegates to state their name and society when speaking before the House. Doctor Long stated that a recommendation by a reference committee is automatically introduced as a motion and does not require a second.

The Reference Committee reports considered by the House are attached and made a part of these minutes.

REPORT OF REFERENCE COMMITTEE NO. 1:

Presented by Michael Haugh, MD, Tulsa.

Reference Committee No. 1 approved the following items without amendment.

ITEM 1. Report of the Board of Trustees:

The Reference Committee commended the Board of Trustees on their diligence and especially commended Elvin M. Amen, MD, Chairman, and Ray McIntyre, MD, Vice-Chairman.

ITEM 3. Board of Trustees Report A — Foreign Medical Graduates.

ITEM 4. Report of the President — The Reference Committee expressed its deepest appreciation to James B. Pitts, Jr., MD, for his exceptional leadership throughout the year.

ITEM 5. Report of the Secretary-Treasurer —

The Reference Committee expressed its appreciation to Armond Start, MD, for his diligence in overseeing the finances of our association.

ITEM 8. Report of the Constitution and Bylaws Committee.

ITEM 9. Report of the OSMA Auxiliary. The Reference Committee congratulated Mrs Sherry Strebel for her outstanding dedication and leadership.

ITEM 10 (A). Report of the Physicians Liability Insurance Company.

ITEM 11. Resolution 4—Salute to the OSMA Auxiliary.

ITEM 14. Resolution 12—Reciprocity for Continuing Medical Education.

Reference Committee 1 approved the following items as amended:

ITEM 2. Supplemental Report of the Board of Trustees — Page 4, Lines 13 and 14 changed to read, "presentation of the Outstanding

Layman Award to Henry Bellmon." Reference Committee 1 recommended that *the President of OSMA instruct the proper OSMA entity to study the need of increased perinatal resources in education and increased utilization of existing resources.*

ITEM 6—Budget and Audit Committee Report and Management Letter from Auditor—

The Reference Committee elected to separate these two items and recommended that *the Budget and Audit Report be adopted and that the Management Letter from the Auditor be referred to the Board of Trustees for study and application of those items which will be of benefit to this association.*

ITEM 7. Report of the Council on Medical Education — The Reference Committee recommended that *the Report of the Council on Medical Education be adopted.* It was pointed out in the Reference Committee that there is an error in Section C of the Report. The Loan and Scholarship Fund was *not* abolished but funds *unearmarked*. The Reference Committee recommended that *the concept of fully funding a Professorship in Diabetes be referred to the Council on Medical Education with a report brought back to the Board of Trustees.*

ITEM 10. Report of the Physicians Liability Insurance Company and Addendum —

The Reference Committee recommended that *with each year's PLICO Report, the OSMA be furnished with an accounting of management's funds including actual cost of management and to include the profit to the managing company.*

There was much discussion concerning this motion.

It was then brought to a question and *the motion failed.*

ITEM 12. Resolution 6—Student Loan Fund

The Reference Committee recommended that Resolution 6 be adopted with the following change:

In the RESOLVED, line 2, change the voluntary contribution from \$10.00 to \$25.00.

The Reference Committee recommended that *the Board of Trustees be authorized to place the remaining unearmarked funds, approximately \$60,000.00, from the original loan and scholarship fund into the newly approved educational and research fund of the OSMA.*

ITEM 15. Resolution 16 — Claims Made Insurance

The Reference Committee recommended that Resolution 16 be adopted with the following editorial change:

On page 3, line 2, the word "Directors" should be changed to read "Trustees."

The Reference Committee also recommended that *the information in the PLICO Report be used for dissemination to all OSMA members.*

A motion was made to amend this motion and that *the information in the PLICO Report be disseminated to all PLICO policyholders under the auspices of the OSMA.* This amended motion was seconded and approved. At this time, there was discussion and a motion was made to the amended motion that *the information in the PLICO Report be sent to all OSMA members and PLICO policyholders and that the cost of this be borne by PLICO.*

This amendment to the amended motion was seconded and approved.

Reference Committee I rejected the following item:

ITEM 13. Resolution — Test-Tube Baby Centers—

After much discussion and study of all the implications of the Resolution, it was an unanimous consensus that the professional liability involved will be properly researched by PLICO and, therefore, recommended that *Resolution 8 be rejected.*

The Reference Committee appreciated the sincere intent of the Resolution.

Dr Haugh thanked everyone on his Reference Committee for their time and help.

A motion was made to adopt the Report of the Reference Committee No. I as a whole. The motion was seconded and carried.

REPORT OF REFERENCE COMMITTEE NO. II:

Presented by Elaine Davis, MD, Enid.

Reference Committee No. II approved the following items without amendment.

ITEM 1. Report of the Council on Planning and Development.

ITEM II. Report of the Council on Professional and Public Relations—Reference Committee II commended the Council for a job well done during the last year.

ITEM III. Report of the Council on Public and Mental Health.

ITEM IV. Report of the *Journal of the Oklahoma State Medical Association.*

Reference Committee II defeated the following items with recommendations:

ITEM V. Resolutions 5, 10, and 11 — The Reference Committee considered Resolutions 5, 10, and 11 together because of the similarity of content. Your Reference Committee recommends that *all three resolutions be rejected and that the following substitute resolution be adopted:*

Resolved, that the House of Delegates of the Oklahoma State Medical Association recommend to the Board of Directors of the Oklahoma Foundation for Peer Review that it approve the participation of the Foundation in a program to provide fee-for-service review.

At this time, a substitute to the substitute resolution was presented. It read as follows: Be it *Resolved*, that when present federal contracts of the Oklahoma Foundation for Peer Review expire that the Oklahoma Foundation for Peer Review be liquidated and resume functioning under the concept, rules and regulations of the OURS Program,

Be it further *Resolved*, that the Board of Directors of the OURS Program be appointed by the Board of Trustees of the Oklahoma State Medical Association,

Be it further *Resolved*, that the OURS Program be authorized to negotiate contracts with whatever groups wish to contract for peer review, be it private or public, using the OURS criteria,

Be it further *Resolved*, that no monies be expended by the Oklahoma State Medical Association but that the OURS Program be allowed to stand or fall on its own merits. This substitute to the substitute resolution was introduced by M. Joe Crosthwait, MD, Midwest City. Dr Crosthwait stated that the word "federal" in the first resolve should be struck, so that the first line reads:

"Be it *Resolved*, that when present contracts of."

This substitute to the substitute resolution was then seconded by Ed Norfleet, MD, Tulsa.

A motion was made that *the substitute resolution and substitute to the substitute resolution be referred to the Board of Trustees.* *This motion was seconded.*

A motion was made *to vote on the question.* This motion was seconded and approved.

The motion that the substitute resolution and substitute to the substitute resolution be referred to the Board of Trustees was brought to a vote and *the motion failed*.

A motion was made *to limit further debate on the original recommendation of the reference committee to three pros and three cons, no longer than three minutes each. This motion was seconded and approved.*

M. Joe Crosthwait, MD, stated he was in favor of the substitute resolution presented by Reference Committee II and *made a motion that the substitute resolution be brought to a question. This motion was seconded and approved.*

The substitute resolution recommended by the reference committee was then voted on and approved.

ITEM VI. Special Report of the Oklahoma Foundation for Peer Review, Inc. — Reference Committee II recommended *that the Special Report of the Oklahoma Foundation for Peer Review, Inc., be filed for information.*

A motion was made to adopt the report of Reference Committee No. II as a whole. The motion was seconded and carried.

REPORT OF REFERENCE COMMITTEE NO. III:

Presented by Raymond L. Cornelison, Jr., MD, Oklahoma City.

Reference Committee No. III approved the following items without amendment.

ITEM 1. Report of the Council on Governmental Activities—

The Reference Committee made note of the great amount of work done by the members of the Council on Governmental Activities.

ITEM 2. Report A of the Council on Governmental Activities—

The Reference Committee commended Perry Lambird, MD, for the amount of time spent on the Council on Governmental Activities.

ITEM 3. Report of the Council on State Legislation—

The Reference Committee was impressed with the amount of time and involvement by the chairman and members of this council.

ITEM 4. Report of the Council on Medical Services—

The Reference Committee extended its appreciation to the council chairman and members for their diligent work.

ITEM 5. Report of the Council on Members Services—

The Reference Committee commended the members of this council for their fine work.

ITEM 6. Report of the Ad Hoc Committee on Medical Malpractice—

The Reference Committee commended the OSMA Board of Trustees for their insight in selecting a committee to study the issue of potential malpractice crisis.

ITEM 9. Resolution #3—Assignment of Benefits—

The Reference Committee made note that this resolution refers *only* to private insurance, *not* assignment of Medicare or Medicaid.

ITEM 10. Resolution #7—Voluntary Repository for Adverse Reaction to Drugs.

ITEM 11. Resolution #9—Appropriate and Equitable Medicare/Medicaid Reimbursement.

ITEM 12. Resolution #13—Clean Air Act.

ITEM 13. Resolution #14—County Medical Legislative Meetings.

ITEM 14—OMPAC Board and Resolution #15—Increase of OMPAC Membership — The Reference Committee was appalled at the low membership in OMPAC. They went on record as unanimously supporting the report and resolution and urged all members to become OMPAC members and strengthen the political voice of medicine.

The Reference Committee made a recommendation that Item 8—Resolution #2—Non-Discriminatory Health Care Reimbursement *be referred to the PLICO Board for disposition.*

ITEM 7. Resolution #1 — Medical Orders by Non-Medical Personnel—Reference Committee III rejected this resolution and recommended that the following substitute be adopted:

Resolved, that the Oklahoma State Medical Association initiate a cooperative study committee with the Oklahoma State Nursing Home Association, the Department of Human Services, and the Oklahoma State Department of Health, to educate non-medical personnel as to the laws and regulations governing the ordering and distribution of medication in long-term care facilities in Oklahoma.

A motion was made to adopt the substitute resolution prepared by Reference Committee III. This motion was seconded and approved. A mo-

tion was made to adopt the report of Reference Committee III as a whole. The motion was seconded and carried.

IX. ANNOUNCEMENTS OR OTHER BUSINESS:

Floyd Miller, MD, asked that the rules be suspended and introduced a late resolution stating that the House of Delegates show its appreciation to James Funnell, MD, and the OSMA staff for the wonderful annual meeting they have put on this year.

Robert Perryman, MD, reminded everyone of the OSMA Presidential Banquet and Ball at 7:00 PM in the Grand Ballroom.

X. ADJOURNMENT:

A motion was made for the Closing Session of the 76th Meeting of the House of Delegates to adjourn. Motion was seconded and approved. The House of Delegates adjourned at 2:25 PM.

Recorded by Susan Meeks.

Report of REFERENCE COMMITTEE I

Presented by Michael J. Haugh, MD,
Chairman

Mr Speaker and Members of the House of Delegates, Reference Committee I gave careful consideration to the several items referred to it and submits the following report:

(1) REPORT OF THE BOARD OF TRUSTEES

RECOMMENDATION:

Mr Speaker, your Reference Committee considered the Report of the Board of Trustees and would like to commend them on their diligence and especially commend Elvin M. Amen, MD, Chairman, and Ray McIntyre, MD, Vice-Chairman. The Reference Committee recommends that *the report of the Board of Trustees be adopted.*

(2) SUPPLEMENTAL REPORT OF THE BOARD OF TRUSTEES

RECOMMENDATION:

Mr Speaker, your Reference Committee recommends that *the Supplemental Report of the Board of Trustees be adopted.* In the portion of

the Report pertaining to the Peri-Natal Committee (page 3, line 10), it is recommended by your Reference Committee that *the President instruct the proper OSMA entity to study the need of increased peri-natal resources in education and increased utilization of existing resources.*

(3) BOARD OF TRUSTEES REPORT A—FOREIGN MEDICAL GRADUATES RECOMMENDATION:

Mr Speaker, your Reference Committee recommends that *Report A of the Board of Trustees be approved.*

(4) REPORT OF THE PRESIDENT RECOMMENDATION:

Mr Speaker, your Reference Committee would like to express its deepest appreciation to James B. Pitts, Jr., MD, for his exceptional leadership throughout the past year and we recommend that *the Report of the President be approved.*

(5) REPORT OF THE SECRETARY- TREASURER RECOMMENDATION:

Mr Speaker, your Reference Committee would like to express its appreciation to Armond Start, MD, for his diligence in overseeing the finances of our association and recommends that *the Report of the Secretary-Treasurer be adopted.*

(6) BUDGET AND AUDIT COMMITTEE REPORT AND MANAGEMENT LETTER FROM AUDITOR

RECOMMENDATION:

Mr Speaker, your Reference Committee elected to separate these two items and recommends that *the Budget and Audit Report be adopted and that the Management Letter from the auditor be referred to the Board of Trustees for study and application of those items which will be of benefit to this association.*

(7) REPORT OF THE COUNCIL ON MEDICAL EDUCATION

RECOMMENDATION:

Mr Speaker, your Reference Committee recommends that *the Report of the Council on Medical Education be adopted.* It was pointed out in the Reference Committee that there is an error in Section C of the Report. The Loan and Scholarship Fund was not abolished but funds unearmarked. Also, your Reference Committee recommends that *the concept of fully funding a Professorship in Diabetes be referred to the Council on Medical Education with a report brought back to the Board of Trustees.*

(8) REPORT OF THE CONSTITUTION AND BYLAWS COMMITTEE

RECOMMENDATION:

Mr Speaker, your Reference Committee recommends that *the Report of the Constitution and Bylaws Committee be adopted.*

(9) REPORT OF THE OSMA AUXILIARY

RECOMMENDATION:

Mr Speaker, your Reference Committee would like to congratulate Mrs Sherry Strebel for her outstanding dedication and leadership and recommends that *the Report of the OSMA Auxiliary be adopted.*

(10) REPORT OF THE PHYSICIANS LIABILITY INSURANCE COMPANY AND ADDENDUM

RECOMMENDATION:

Mr Speaker, your Reference Committee recommends that *the Report of the Physicians Liability Insurance Company and its Addendum be adopted. It is also recommended that with each year's PLICO Report, the OSMA be furnished with an accounting of management's funds including actual cost of management and to include the profit to the managing company.*

(11) RESOLUTION 4 — SALUTE TO THE OSMA AUXILIARY

RECOMMENDATION:

Mr Speaker, your Reference Committee recommends that *Resolution 4 be adopted.*

(12) RESOLUTION 6—STUDENT LOAN FUND

RECOMMENDATION:

Mr Speaker, your Reference Committee recommends that *Resolution 6 be adopted with the following change:*

In the RESOLVED, line 2, your Reference Committee recommends *changing the voluntary contribution from \$10.00 to \$25.00.*

Your Reference Committee also recommends that *the Board of Trustees be authorized to place the remaining unearmarked funds, approximately \$60,000.00, from the original loan and scholarship fund into the newly approved educational and research fund of the OSMA.*

(13) RESOLUTION — TEST-TUBE BABY CENTERS

RECOMMENDATION:

Mr Speaker, your Reference Committee studied all of the implications of the Resolution and we appreciate the sincere intent, but it was a unanimous consensus that the professional liability involved will be properly researched by PLICO and, therefore, we recommend that *Resolution 8 be rejected.*

(14) RESOLUTION 12 — RECIPROCITY FOR CONTINUING MEDICAL EDUCATION

RECOMMENDATION:

Mr Speaker, your Reference Committee recommends that *Resolution 12 be adopted.*

(15) RESOLUTION 16 — CLAIMS MADE INSURANCE

RECOMMENDATION:

Mr Speaker, your Reference Committee recommends that *Resolution 16 be adopted with the following editorial change:*

On page 3, line 2, the word "Directors" should be changed to read "Trustees."

Your Reference Committee also recommends that *the information in the PLICO Report be used for dissemination to all OSMA members.*

Mr Speaker, this concludes the Report of Reference Committee I. Your Reference Committee wishes to thank all who participated in the hearing and contributed in the preparation of this report.

Michael J. Haugh, MD, Chairman
Ralph Buller, MD
Ronald Elkins, MD
Charles M. Harvey, MD
Leo Meece, MD
Milton R. Workman, MD
Rick Ernest, Staff
Susan Meeks, Staff

Report of the
BOARD OF TRUSTEES
(APPROVED)

SUBJECT: Annual Report

PRESENTED BY: Elvin M. Amen, MD,
Chairman

REFERRED TO: Reference Committee I

INTRODUCTION:

The Board of Trustees of the OSMA has completed three of its quarterly meetings for organizational year 1981-82. The fourth, or annual meeting, of the Board is being held in conjunction with this Annual Meeting of the Association. The proceedings of the Annual Board Meeting are covered in the Supplemental Report of the Board of Trustees.

During the past year the Board met on August 15 and November 22, 1981 and March 6th, 1982. A quorum was certified for each meeting with an average of 22 Officers and Trustees and 5 AMA Delegates or Alternates in attendance.

PLICO:

The Association's wholly-owned Professional Liability Insurance Company, PLICO, was expanded into the area of health insurance for physicians and their office employees during the past year.

PLICO and PLICO Health will report separately to the OSMA House of Delegates.

During its August 15 meeting, the Board of Trustees heard a report regarding the third-year capitalization assessment for PLICO. When the company was originally formed, it was decided to have three consecutive yearly assessments of OSMA members and non-members insured through PLICO in order to offset the capitalization cost. Consideration was given to dropping the third year's assessment because the company had met its capitalization goal. However, following the discussion, the OSMA Board of Trustees recommended to the PLICO Board of Directors that the third year's assessment be carried out if the PLICO Board determined that it was needed.

The creation of PLICO Health grew out of an activity by the Board of Trustees during its August 15 meeting. At that time the Board discussed the Louisiana State Medical Society's CHIP Program for the development of a health insurance plan. (At an earlier meeting, the Board had instructed the Association's Council on Planning and Development to develop a prototype plan for consideration.)

Following a discussion of the proposed plan, the Board instructed the Executive Committee and the PLICO Board of Directors to continue investigating the CHIP Program and to be prepared to report at the next Board Meeting scheduled for November 22.

At the next meeting, the C. L. Frates Company, working in conjunction with the PLICO Board of Directors, proposed that the Association consider sponsoring a CHIP-type health and accident insurance program. The proposal was based on a feasibility study that indicated that nearly one-third of the physicians in the state of Oklahoma would both approve and participate in a health and accident program sponsored by the Association.

Following lengthy discussions, the Board of Trustees voted to accept the recommendation of the PLICO Board of Directors for the crea-

tion of such a company under the auspices of PLICO.

Shortly after the first of 1982, PLICO began writing health and accident coverage.

NURSE PRACTITIONER POLICY:

The lack of direction from either the law or regulations regarding the use of Nurse Practitioners was discussed by the Board on August 15. At that time a policy was adopted indicating that the Nurse Practitioner should be working under the direction of a physician for "delegated medical functions" and that such direction requires that the physician be immediately available for consultation.

The policy went on to define "communication and consultation" to mean that amount of supervision which would assure that the nurse practitioner will be functioning appropriately and stated, "however, communication and consultation with the physician is not required when the nurse is functioning in a life-threatening emergency."

The policy closed by stating, "when taking any action in response to a patient's medical condition, the final medical responsibility for that patient rests with the physician."

PSYCHIATRIST SHORTAGE:

During its May meeting the OSMA House of Delegates passed a resolution and advanced it to the AMA calling for a study of the shortage of psychiatrists in Oklahoma.

The Physician Manpower Training Commission had suggested that the OSMA perform an in-depth study on the subject in the form of a one-day seminar. This suggestion was taken under advisement by the Board of Trustees and, during its August 15 meeting, the Board directed the Association's Council on Public and Mental Health to begin a study on the shortage of psychiatrists.

PEER REVIEW FOUNDATION:

The Oklahoma Foundation for Peer Review reported to the August 15 meeting of the Board that there was a possibility that the foundation might not be funded for the 1981-82 year. A recent evaluation of the foundation had not resulted in enough evaluation points to assure the funding.

It was reported that the foundation had appealed the evaluation and felt confident that enough additional points would be awarded to assure that it would at least meet the minimum requirement. However, there was

expressed fear on the part of the foundation that the Health Care Financing Administration might "change the rules" at the last minute and decide that the minimum number of points was still not enough. (The foundation successfully completed its appeal, was awarded the additional points, and received its funding.)

MEDICARE REIMBURSEMENT AREAS:

During 1981-82 the Board of Trustees heard several reports about the possibility of seeking a change in the medicare reimbursement areas for the state of Oklahoma.

In 1981 the House of Delegates of the Association passed a resolution calling for more equitable medicare fee reimbursements.

It was felt that the unequitable reimbursements were brought about by the division of the state into five different reimbursement zones. This inequity had also come to the attention of the Oklahoma Health Systems Agency and was the subject of a task force study.

An HSA representative reported to the Board of Trustees that the Health Care Financing Administration had been asked to study the medicare reimbursement rates in Oklahoma and determine whether or not there was an inequity brought about by the five different reimbursement zones. He also noted that the issue basically deals with primary care services which were prevalent within the urban areas.

During its August 15 meeting, the Trustees endorsed the effort of the Health Systems Agency to persuade HCFA to reassess the need for five reimbursement zones in the state.

PROFESSIONAL LIABILITY AD HOC COMMITTEE:

While the professional liability situation in Oklahoma appears to be very stable, nationwide there is still an increase in the number of malpractice lawsuits, and the size of judgments and settlements. On November 22 the Board of Trustees directed the President of the State Medical Association to create an Ad Hoc Committee to study possible legislative amendments or deletions that would help ease the current malpractice situation.

Once appointed the committee began work immediately to develop a series of possible legislative interventions. During its March 6th meeting, the Board of Trustees was informed

that the committee was working closely with the state legislative committee.

ENDOWMENT FUND:

The Trustees received reports on the OSMA's attempt to endow a special chair at the University Health Sciences Center in both the November 22 and March 6 meetings. In November it was reported to the Board that the OSMA had fallen far short of the \$750,000 target amount needed. However, it had collected \$110,000 that needed to be dispersed in some appropriate manner.

It had earlier been determined by the Board and the House of Delegates that it was no longer realistic to believe that the association could endow a chair.

During its November meeting, the Trustees instructed the OSMA staff to contact each of the donors and ask them if they would like to receive a refund of the money, or allow the funds to be used in some other appropriate manner.

The Association's Council on Medical Education, during the March 6 meeting of the Trustees, recommended two alternatives for use of the funds. Each person that had contributed would be requested to either ask for a refund, or vote for one of the two alternatives. The alternative receiving the most votes would then receive all of the funds.

Under alternative number one the funds would be placed in an interest-bearing account and the interest from the fund would be used to finance the scientific program for the OSMA annual meeting each year.

Alternative number two would require the funds to be used to create an OSMA Professorship in Diabetes. The funds would be matched dollar for dollar from outside sources within one year.

(Whether or not the vote tally will be completed by the time of this OSMA annual meeting is unknown at the writing of this report.)

TOM LYNN, MD, LECTURESHIP:

A new lectureship series on ethics, law and public policy has been created by the OU Medical School's Department of Community Medicine. Named in honor of Thomas N. Lynn, Jr., MD, former Dean of the College of Medicine (and member of the OSMA Board of Trustees), the series actually began in October, 1981.

The Board of Trustees during the Novem-

ber 22 meeting allocated \$2,000 to assist in funding the Tom Lynn Lectureship Series.

AMA HOUSE OF DELEGATES:

During 1981-82, the OSMA sponsored several resolutions that were presented to the various meetings of the AMA's House of Delegates.

During the June 1981 meeting of the House, the OSMA had submitted two resolutions on awarding states with unified AMA state membership some sort of special recognition. The first resolution called for a \$50 reduction in dues to AMA members from unified states, while the second resolution would have allowed one extra delegate to the AMA House of Delegates from each unified state.

Both of these resolutions were referred to the AMA's Board of Trustees for further study during the June meeting.

A resolution requesting the AMA to make retired members of the association dues exempt was prepared at the request of the Board of Trustees during the August 15 meeting. The resolution was to be introduced at the interim meeting of the AMA in December of 1981.

During its March 6th meeting, the Trustees instructed the Oklahoma AMA Delegation to introduce and attempt to secure passage of the following resolution:

WHEREAS, the first medical auxiliary of the United States was founded seventy-five years ago in Shawnee, Oklahoma, and

WHEREAS, the support received by physicians from auxiliary members at all levels of the federation is genuinely appreciated and heartfelt; therefore, be it

RESOLVED that the American Medical Association salutes the Diamond Jubilee of the Oklahoma State Medical Association Auxiliary, the nation's first.

SPECIAL PRESENTATIONS:

Two special presentations were authorized by the Trustees during the 1981-82 year.

On November 22, R. Palmer Howard, MD, was presented a plaque by the Editor of the *OSMA Journal*, Mark R. Johnson, MD, for his many contributions to the *Journal* and to the medical profession.

Roy Lytle, the OSMA's long-term legal counsel, was to be honored at this meeting of the OSMA House of Delegates by the presentation

of an honorary membership in the association. The membership was authorized for presentation by the Board of Trustees when it met on March 6.

Mr Lytle's untimely death deprived the Board of Trustees and this House of Delegates with an opportunity to honor one of Oklahoma medicine's long-time friends.

LIFE MEMBERSHIP AWARDS:

The following physicians have been awarded life membership in the association through application from component societies and with the approval of the Board of Trustees:

AUGUST 15, 1981

William C. Tisdal, MD, Clinton

NOVEMBER 22, 1981

Claude M. Bloss, Jr., MD, Oklahoma City

Forest R. Brown, MD, Oklahoma City

John J. Coyle, MD, Oklahoma City

R. Palmer Howard, MD, Oklahoma City

William P. Neilson, MD, Enid

MARCH 6, 1982

Jack L. Riggall, MD, Oklahoma City

James S. Petty, MD, Oklahoma City

James R. Riggall, MD, Oklahoma City

Vance Lucas, MD, Tulsa

F. C. Buffington, MD, Norman

John A. Brasfield, MD, Tulsa

Murray M. Cash, MD, Tulsa

Nevin W. Dodd, MD, Tulsa

Phil Haddock, MD, Norman

Joseph R. Henke, MD, Guthrie

Hugh B. Nicholas, MD, Tulsa

George Stevens, MD, Ada

Orville Tackett, MD, Norman

William A. Waters, MD, Tulsa

Respectfully submitted,

Elvin M. Amen, MD, Chairman

OSMA Board of Trustees

Supplemental Report of the BOARD OF TRUSTEES (APPROVED)

Mr Speaker and Members of the House:

The Board of Trustees met at its Annual Meeting yesterday, and this supplemental report identifies for the Delegates the actions taken for the Board at this meeting. This report will be referred to Reference Committee I, to be considered along with the Annual Report of the Board which was included in the Delegates' Handbook. The Board Meeting was called to order by Elvin M. Amen, MD, Chairman, at 4:30 PM with introductions of guests

and announcement that this was the 76th annual meeting of the Oklahoma State Medical Association.

The Board approved the minutes with the added changes of the March 6 Board Meeting.

James B. Pitts, MD, President, gave his final report to the Board as the Association's highest elected official. Dr Pitts expressed his appreciation to the Board Members for their assistance throughout the year and his improved relations with the Board and officers. He asked the leaders of the Association to urge continuation of Association unity and encouraged them to be ambassadors for a unified national association. (A copy of Dr Pitts' report will be made a part of the official minutes of the Association.)

Mrs Sherry Strebel gave a report to the Board on the increase of membership in the Auxiliary and thanked the Board Members for their support and enthusiasm throughout the year.

Armond Start, MD, Secretary-Treasurer, referred the Board to the financial statements submitted to Reference Committee I and also to the quarterly financial statement included in the Board packet. Dr Start stated that the Association was in good financial condition, having ended the 1981 fiscal year with a surplus over expenses. The budget for 1982 indicates a surplus in excess of \$50,000. He also stated that for the first three months of the 1982 fiscal year, the Association showed a surplus over expenses of more than \$70,000, but told the Board it was due to the income revenue in excess of expenses at this particular time of the year and he expected the expenses would more approximate income later in the year. The Board approved the Secretary-Treasurer's report.

The Board was asked to, and approved a bank resolution to authorize the Secretary-Treasurer, the Executive Director, and the Administrative Assistant of Financial Affairs to make telephone transactions of AMA dues to the appropriate Chicago bank.

A request from the Physician Manpower Training Commission to expand the Oklahoma State Medical Association data base was approved providing appropriate confidentiality agreements were negotiated.

In other action, the Board:

*Re-appointed Mark R. Johnson, MD, Editor-in-Chief of the Oklahoma State Medical Association *Journal*;

*Approved the AMA DATTA proposal and instructed the president of the Association to make nominations for the committee;

*Approved the appointment of Edward Soule, as General Counsel of the Association;

*Instructed the President to appoint someone to study the feasibility of establishing a committee to provide Peri-Natal resources and education;

*Accepted late resolution No. 16;

*Denied the request of Patrick O'Dea, MD, for a prorata refund for his PLICO assessment;

*Instructed the staff to prepare documents forming an educational and research foundation;

*Approved contribution of dues to the Oklahoma Council on Economic Education and the National Chamber of Commerce;

*Authorized the President and Executive Director to make decisions regarding the Oklahoma State Medical Association employees' pension plan and report them to the Executive Committee.

*Approved special memberships as follows:

Homer V. Archer, MD, Oklahoma City

Elizabeth P. Fleming, MD, Norman

Emma Jean Anthis, MD, Healdton

Ralph Phelan, MD, Hobart (retroactive to 1975)

Bill G. Henley, MD, Lawton

Thornton Kell, MD, Ardmore

Paul H. Rempel, MD, Enid

The Board gave a standing ovation to Elvin M. Amen, MD, chairman, and vice-chairman Ray V. McIntyre, MD, and elected Kent Braden, MD, Oklahoma City, and Mike Haugh, MD, Tulsa as chairman and vice-chairman of the Board respectively.

The Board accepted for presentation to the House of Delegates reports presented in the handbook and approved the presentation of the Outstanding Layman Award to Henry Bellmon.

There being no further business, the Board adjourned at 5:55 pm.

Report: A
(APPROVED)

SUBJECT: Foreign Medical Graduates in Oklahoma

PRESENTED BY: Elvin M. Amen, MD,
Chairman Board of Trustees

REFERRED TO: Reference Committee I

Last May the OSMA House of Delegates approved a substitute for Resolution XI from Kingfisher County Medical Society. The substitute resolution called for "An in-depth and intensive study of the methods by which the state of Oklahoma can insure that graduates of non-U.S. and non-Canadian medical schools meet the same high standards as do graduates of Oklahoma state-supported schools as a condition of licensure in the state of Oklahoma, and urgently recommend legislation to update the Oklahoma Medical Practice Act."

In studying the situation of foreign medical graduates licensed in Oklahoma over the past ten years, we find that there was a definite increase in the number of foreign medical graduates for the first seven years. In 1971, a total of 262 physicians were licensed to practice in Oklahoma, of which 30 were foreign graduates. The trend continued upward until 1977 when 211 of 515 new licensees were graduates of foreign medical schools. We really don't know what to attribute this to, whether

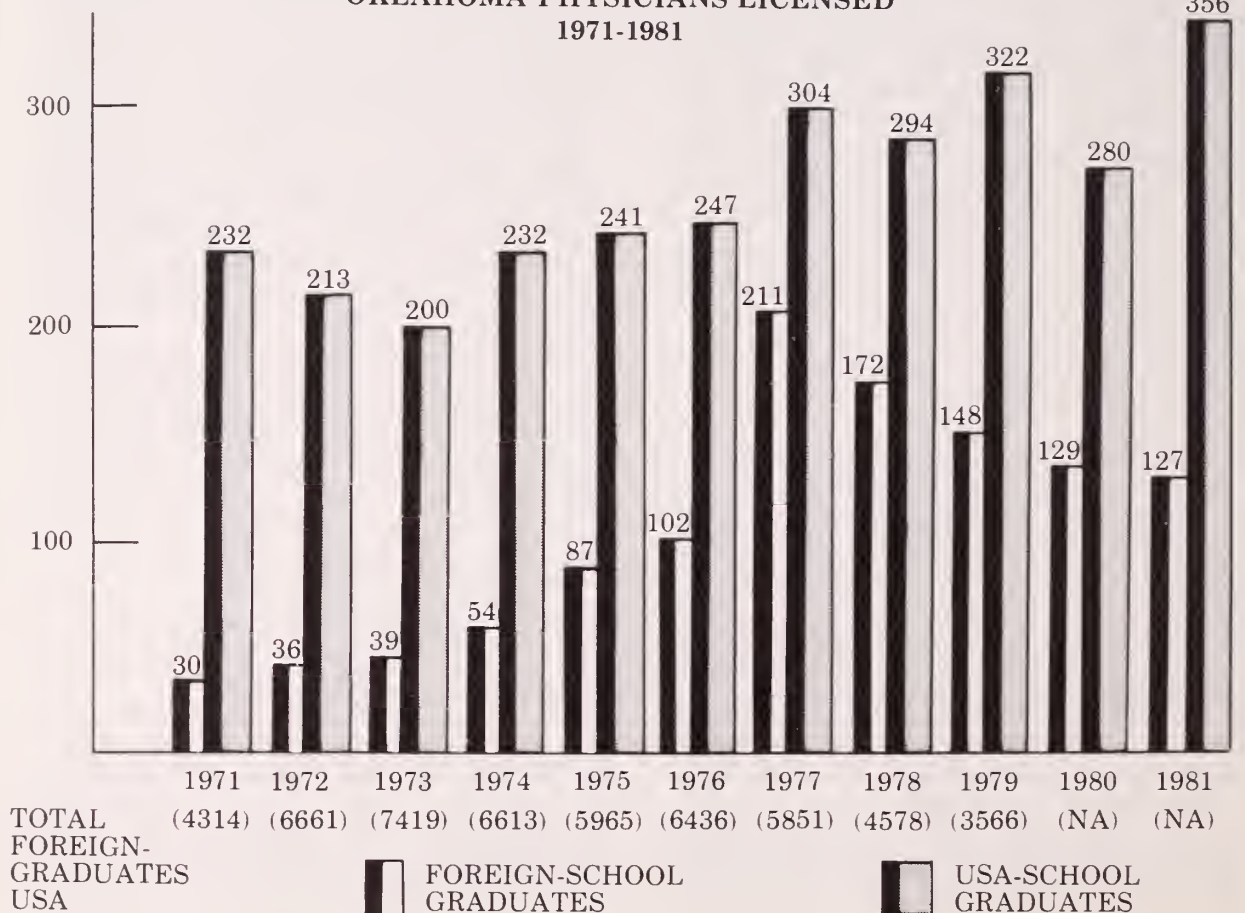
the climate was just right for people to migrate to Oklahoma or what, but there definitely was a substantial buildup until 1977.

From 1977 until this past year, there has been a less dramatic but marked drop off. In researching this material, we find from the AMA this can be attributed to two major factors. The first factor deals with the passage in 1978 of Public Law 944-84 which among other things required a foreign medical graduate to have either a job or residency appointment before he or she is approved for a visa. It was felt by an AMA spokesman that this is the chief reason for the decline over the past four years. The second important factor was that even though the English proficiency test (ECFMG) has been around for some time, the passing grade was increased and the change has made it more difficult for many foreign medical graduates to pass.

An interesting sideline to this situation is that of all the foreign medical graduates entering this country, many of them, and the number is growing, are U.S. born.

Even though the resolve of substitute Resol-

OKLAHOMA PHYSICIANS LICENSED
1971-1981



ution XI was to identify ways to assure the competency of non-U.S. medical schools and therefore the competency of foreign medical graduates, it is perceived that the intention was to slow down the numbers of foreign medical graduates being licensed in the state of Oklahoma. If changing the medical practice act would assist in this goal, then that should be looked at, also.

However, in view of the aforementioned information, it doesn't appear that changing the medical practice act is necessary, because other laws already in place have contributed directly to the decline of the total numbers of foreign medical graduates licensed in the entire United States.

Report of the
SECRETARY-TREASURER
(APPROVED)

SUBJECT: Annual Report
PRESENTED BY: Armond H. Start, MD,
Secretary-Treasurer
REFERRED TO: Reference Committee I

INTRODUCTION:

The association continues to maintain a strong fiscal posture. The 1981 operations resulted in an excess of income over expenses of \$52,694.00. Assets which included OSMA's investment in PLICO grew from \$3,626,973.00 to \$5,049,772.00, current and long term obligations total \$2,164,400.00 leaving the association a substantial net worth of \$2,885,372.00.

INCOME:

The association's principal source of income is dues from members. However, we have other income from contracts, rent, sales, advertising, investments and commissions from AMA. Following is a breakdown of income by source.

Membership Dues	\$460,558.00
Interest & Commissions	117,503.00
Lease — Income	30,540.00
Sales—Directory	25,912.00
Contracts—Risk Management	77,500.00
Advertising & Subscription	
OSMA Journal	81,556.00
Annual Meeting	14,190.00
Miscellaneous	9,497.00
	\$817,256.00

Estimated Income for 1981 was \$780,250.00

EXPENSES:

The association's expenses will vary depending on programs adopted by the House of Delegates and actions taken by the Board of Trustees and the Executive Committee throughout the year. Total expenses for 1981 were approximately 13% above 1980 most of which is attributable to the underwriting and risk management activity assumed by the association for PLICO and for which the association is re-imbursed. A detailed presentation of expenses is contained in the audit report on pages 15 and 16. Following is a resume of the major expense categories:

General Membership	\$592,964.00
Council Expenses	28,133.00
Journal	104,604.00
Annual Meeting Expenses	38,861.00
Total	\$764,562.00

Estimated expenses for 1981 were \$780,250.00

1982 BUDGET:

The association's activities for 1982 are not expected to change significantly from 1981. The Council on Long Range Planning and Development does not anticipate new and costly programs unless the House adopts programs not considered in the Council reports. The following budget projections should adequately reflect association income and expenditures for 1982:

INCOME:	
Membership Dues	\$540,000.00
Interest and Commissions	90,000.00
Lease Income	30,000.00
Sales	7,500.00
Contracts	100,000.00
Advertising and Subscriptions	80,000.00
Annual Meeting	10,000.00
Miscellaneous	5,000.00
	\$862,500.00

EXPENSES:

General Membership	\$560,000.00
Council Expense	40,000.00
In-State Travel	7,500.00
Out of State Travel	55,000.00
Journal	80,411.00
Annual Meeting	50,000.00
Depreciation	16,000.00
	\$808,911.00

Based on these projections the association would finish the fiscal year with an excess of income over expenses of \$53,589.00.

SUMMARY:

The OSMA is in good financial condition. We have a 5 to 6 month operating reserve. Our investment in PLICO appears to be sound. We have wisely invested our surplus funds to maximize investment income and our real estate investments are producing an appropriate return. We have made substantial improvements to the headquarters building and unless there are unexpected events the association should operate without another dues increase for several years.

Respectfully submitted,
Armond H. Start, MD, Secretary-Treasurer

Report of the
**COMMITTEE ON APPROPRIATIONS AND
AUDITING**
(APPROVED)

SUBJECT: Annual Report
PRESENTED BY: Ray V. McIntyre, MD,
Vice-Chairman, OSMA Board of Trustees
REFERRED TO: Reference Committee I

The Committee has reviewed the Accountants' Report prepared by Moak, Hunsaker, Rouse, Thomas & Co. and the supplemental material contained therein, including the management letter dated March 30, 1982. It is our opinion that the report accurately reflects the income, expenses and financial condition of the Association.

Ray V. McIntyre, MD, Chairman
Kent Braden, MD, Trustee
Michael J. Haugh, MD

ABBREVIATED FINANCIAL REPORT

(COMPLETE REPORT AVAILABLE UPON
REQUEST FROM THE OSMA.)

OKLAHOMA STATE MEDICAL ASSOCIATION

ACCOUNTANTS' REPORT
DECEMBER 31, 1981 AND 1980

MOAK, HUNSAKER, ROUSE, THOMAS & CO.
CERTIFIED PUBLIC ACCOUNTANTS

OKLAHOMA STATE MEDICAL ASSOCIATION
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 1981 AND 1980

(1) Significant Accounting Policies —

The following is a summary of certain significant accounting policies followed in the preparation of these financial statements:

Property and equipment—

Property and equipment, including the capitalized lease, is recorded at cost. Depreciation of the property, except building, is computed using the straight-line method. Depreciation is not provided on the building. Depreciation is computed over the following estimated useful lives:

	Years
Furniture, fixtures and equipment	3-10

Capital lease—

The capital lease is accounted for under the Statement of Financial Accounting Standards No. 13, Accounting for Leases. Under this method of accounting for capital leases, the asset is amortized on a straight-line basis over the useful life of the asset (10 years) and the obligation, including interest thereon, is liquidated over the life of the lease.

Deferred income—

All income is prorated over the calendar years to which it applies.

Investment in subsidiary—

Investment in the related entity is accounted for by the equity method. Under this method the Association's equity in the net earnings or losses of the subsidiary is included currently in the Association's statement of revenue and expenses. Dividends received from the subsidiary are reflected as a reduction of the investment. The carrying value of the investment approximates the underlying equity of the subsidiary.

Loan acquisition costs—

Loan acquisition costs are amortized on a straight-line basis over the life of the loan.

Organization expense—Subsidiary—

Organization expense is amortized on a straight-line basis over a five-year period.

Organization—

The Association was organized as a nonprofit organization and, as such, is exempt from income taxes under Section 501(c)(6) of the Internal Revenue Code.

OKLAHOMA STATE MEDICAL ASSOCIATION
STATEMENT OF CHANGES IN FINANCIAL POSITION
FOR THE YEARS ENDED
DECEMBER 31, 1981 AND 1980

	1981	1980
WORKING CAPITAL PROVIDED		
From operations—		
Excess of revenue over expenses	\$1,224,268	1,137,779
Expenses not requiring the outlay of working capital during the current period—		
Equity in loss of subsidiary	14,618	48,888
Depreciation and amortization	39,696	38,185
Total From Operations	1,278,582	1,224,852
Transfer from appropriated for loans and scholarships	20,000	2,375
Total Working Capital Provided	1,298,582	1,227,227

WORKING CAPITAL USED		
Purchase of property and equipment	21,310	18,531
Investment in subsidiary	1,000,000	—
Increase in other assets	—	237
Payments on long-term liabilities	7,655	920,162
Payments on long-term obligations under capital lease	5,413	4,410
Total Working Capital Used	1,034,378	943,340
Increase in Working Capital	264,204	283,887

CHANGES IN WORKING CAPITAL

Current assets—		
Cash	7,881	(12,003)
Savings accounts and certificates of deposit	218,541	567,675
Accounts receivable	226,609	(170,015)
Accrued interest receivable	2,896	3,728
Prepaid expenses	(124)	(1,832)
Increase in Current Assets	455,803	387,553

Current liabilities—		
Current portion of long-term liabilities	290	750
Current obligation under capital lease	609	535
Accounts payable	22,856	41,602
Loans and scholarships payable	(100)	—
Accrued liabilities	3,915	(20,438)
Deferred income	164,029	81,217
Increase in Current Liabilities	191,599	103,666
Increase in Working Capital	\$ 264,204	283,887

Certain 1980 amounts have been restated to conform to 1981 presentation.

The accompanying accountants' report and notes are an integral part of this statement.

OKLAHOMA STATE MEDICAL ASSOCIATION NOTES TO FINANCIAL STATEMENTS DECEMBER 31, 1981 AND 1980

(4) Long-Term Liabilities—

The following is a summary of the current and long-term portions of notes payable:

	1981		1980	
	Current Portion	Long-Term Portion	Current Portion	Long-Term Portion
Installment note payable to a company—Secured by equipment—Payable in 60 monthly payments of \$489 including interest at 11 percent—Commencing January, 1979	\$ 4,961	5,536	4,447	10,496
Installment note payable to a company—Secured by real estate—Payable in 180 monthly payments of \$1,448 and one payment of \$69,548 at the end of note including interest at 10 percent—Commencing November, 1979	2,588	141,350	2,812	144,045
	\$ 7,549	146,886	7,259	154,541

Amounts due on long-term liabilities in each of the next five years as of December 31, 1981 are as follows:

1982	\$ 7,549
1983	8,146
1984	2,632
1985	2,653
1986	2,675
Balance	130,780

(5) Accounts Payable—

The following is a summary of the accounts payable:

	1981	1980
Trade	\$ 16,873	30,656
Dues	14,741	5,350
Leebron Memorial Fund	5,755	5,130
Medical education endowment	111,555	84,680
Physicians Liability Insurance Company (Subsidiary)	1,493	1,745
Total	\$150,417	127,561

NOTES TO FINANCIAL STATEMENTS DECEMBER 31, 1981 AND 1980

(2) Long-Term Obligation Under Capital Lease—

The following is a schedule by years of future minimum payments under the capital lease together with the present value of net minimum lease payments as of December 31, 1981:

Fiscal year ended December 31—	
1982	\$6,984
1983	6,984
1984	6,984
Total Minimum Lease Payments	20,952
Less: Amount representing interest	3,981
Present Value of Net Minimum Lease Payments	16,971
Less: Current portion of obligation under capital lease	5,019
Long-Term Obligation Under Capital Lease	\$11,952

Amortization of leased property under the capital lease was \$2,565 for the year ended December 31, 1981. Interest expense on the outstanding obligation under the capital lease was \$2,762 for the year ended December 31, 1981.

(3) Investment in Subsidiary—

On May 3, 1979 the House of Delegates of the Association passed a resolution empowering the members of the Board of Trustees of the Association to organize and form an insurance company wholly owned by the Association for the purpose of writing professional liability and related lines of insurance on Oklahoma physicians. On October 17, 1979 Physicians Liability Insurance Company was formed and capitalized by the Association in the sum of \$150,000 in capital stock and an initial \$1,000,000 of paid-in capital. During 1981 the Association contributed an additional \$1,000,000 of paid-in capital to the company.

OKLAHOMA STATE MEDICAL ASSOCIATION NOTES TO FINANCIAL STATEMENTS DECEMBER 31, 1981 AND 1980

(8) Appropriated for Public Education —

During the fiscal year ended May 31, 1976, the Board of Trustees authorized the amounts collected through special assessments to be transferred to the portion of the fund balance appropriated for public education. The appropriation will be used to inform the general public of governmental, legislative and bureaucratic regulations over the medical profession and the public.

(9) Appropriated for Building Maintenance —

For years prior to 1980, the Board of Trustees had adopted the procedure of appropriating 25 percent of the net operating revenue for each period toward building maintenance. Effective for the year ended December 31, 1980, the Board of Trustees rescinded the 25 percent appropriation.

(10) Professional Liability Stabilization —

The Professional Liability Stabilization Program was established during the year ended May 31, 1976 by assessing the doctors a 15 percent surcharge on their basic professional liability policies. The Insurance Company of North America provided the basic \$100,000/\$300,000 policy. This money is under the control of two trustees, one appointed by the Association and one appointed by the insurer. As of December 31, 1981 the balance on deposit was \$350,936, which is not included in the financial statements. The money will not be utilized unless all established reserves of the insurer are first exhausted through the payment of claims.

(11) Professional Liability Excess Coverage —

During the fiscal year ended March 31, 1977, an insurance plan was formed with Hartford and Lloyd's of London to provide excess professional liability coverage. The excess liability policy will cover losses in excess of \$100,000 and less than \$1,000,000 that exceed \$3.25 million per year. In accordance with the plan, a specified portion of the insurance premiums were deposited in a bank in the name of Oklahoma State Medical Association. The balance of the account on December 31, 1981 was \$1,059,879, which is not included in the financial statements. The funds will be used if the insurers' reserves are exhausted through payment of claims.

OKLAHOMA STATE MEDICAL ASSOCIATION
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 1981 AND 1980

(6) Deferred Income —

The following is a summary of deferred income:

	1981	1980
Dues	\$ 604,060	491,400
Annual meeting	1,038	451
Special assessment — 1981	—	1,170,614
Special assessment—1982	1,221,396	—
	\$1,826,494	1,662,465

On May 3, 1979 the House of Delegates passed a resolution establishing a special assessment. The proceeds of such assessment will be used exclusively for payments of costs of forming and funding Physicians Liability Insurance Company, a wholly-owned subsidiary of the Association. The assessment will not exceed \$2,000 per insured physician who is a member of the Association. The assessment is due on an installment basis over the next three years beginning January 1, 1980.

The deferred special assessment income as of December 31, 1981 and 1980 is comprised of receipts of \$614,726 and \$492,979, respectively, plus unpaid special assessments billed in advance of \$606,670 and \$677,635, respectively.

(7) Appropriated for Loans and Scholarships—

Prior to 1980 the Association voted to appropriate a portion of its dues income for the purpose of making loans to certain medical students qualifying under terms specified by the Association. The dues appropriated under this program were reported as a liability rather than as income on the prior years' financial statements. The accompanying statements have been restated to properly reflect these transactions. The changes are set out below:

Appropriated for Loans and Scholarships—	
Balance—January 1, 1980 as previously reported	\$ —
Add: Restatement of dues set aside for loans	55,907
Balance—January 1, 1981—Restated	\$55,907

In addition, the dues income for 1980 have been increased by \$14,658 to correct the classification error.

By a vote of the House of Delegates, this program has been discontinued and the appropriated fund balance at termination was transferred to unappropriated fund balance.

(12) Subsequent Event—

In February 1982 the Association contributed an additional \$1,150,000 of paid-in capital to Physicians Liability Insurance Company, a wholly owned subsidiary of the Association (see Note 3).

(13) Related Party Transactions—

For the years ended December 31, 1980 and 1981, the Association had an agreement with Physicians Liability Insurance Company, a wholly owned subsidiary, to provide loss prevention services for the insurance company. The Association was reimbursed \$77,500 for their expenses of the project.

(14) Pension Plan—

The Association has a defined benefit pension plan which covers employees who are twenty-four and one-half years of age or older and have at least six months of service. The plan has a fiscal year of June 1 to May 31. The total pension expense for 1981 and 1980 is \$32,457 and \$19,707, respectively. The amount of accrued pension expense for the year is funded by the Association in annual contributions to the pension plan. The actuarial present value of the accumulated benefits to participants of the plan and the net assets available for those benefits as of the beginning of the plan year 1980-1981 is as follows:

	1981
Actuarial present value of the accumulated plan benefits—	
Vested	\$38,741
Nonvested	4,645
Total	\$43,386
Net assets available for benefits	67,053

In determining the actuarial present value of the accumulated plan benefits, an assumed weighted average rate of 6 percent was used.

Report of the
COUNCIL ON MEDICAL EDUCATION
(APPROVED AS AMENDED)

SUBJECT: Annual Report

PRESENTED BY: John R. Alexander, MD,
Chairman

REFERRED TO: Reference Committee I

INTRODUCTION:

The Council shall study and make recommendations related to all matters of maintaining or improving the level of competency of physicians in Oklahoma including but not limited to maintaining liaison with the medical education colleges in Oklahoma, to conducting continuing medical education courses for association members, to the accreditation of medical education programs in Oklahoma. It will also monitor continuing medical education standards as they may be required by association policy.

REVIEW OF ACTIVITIES:

A. Continuing Medical Education — The council continues its activities of surveying and certifying for accreditation the continuing medical education programs of hospitals over the state of Oklahoma. As an extension of the national accreditation organization, the Accreditation Council on Continuing Medical Education, the Oklahoma State Medical Association has the sole responsibility of approving such courses. All but two hospitals certified over the past four years are now fully accredited and one of those institutions is due a resurvey this summer and the other was decertified because it was not fully complying with the essentials for certification. At the present time the following institutions are fully accredited to produce and co-sponsor Category I Continuing Medical Education Programs:

Hillcrest Medical Center, Tulsa

St John Medical Center, Tulsa

St Francis Hospital, Tulsa

St Anthony Hospital, Oklahoma City

South Community Hospital, Oklahoma City

Baptist Medical Center, Oklahoma City

Presbyterian Hospital, Oklahoma City

Mercy Health Center, Oklahoma City

It has been very encouraging to find that the CME Programs are continuing to prosper, even though the requirement for continuing medical education in order to be a member of the association has been removed.

B. Medical School Endowment — In 1978 this House approved the creation of an endowment fund for the purpose of financing a "Chair" in graduate medical education at the University of Oklahoma Health Sciences Center. The fund was to be raised over a three-year period, with OSMA members contributing \$200.00 each year. It was felt by experts that \$750,000.00 was necessary in order to actually endow the position. By the end of 1981, which was the end of the three-year fund raising effort, association members had contributed approximately \$110,000.00 — far short of the original goal. In addition, the House of Delegates repealed its continuing medical education requirement and the University of Oklahoma Health Sciences Center Officials questioned the need for a fulltime professor of continuing medical education. Therefore, this House instructed the Board of Trustees to devise an alternate plan on how the money be used. The Board was unanimous in its feelings that an offer to return the donation should

be made first, since it was not to be used as originally outlined. They also realized that most of the contributors would not want their donations returned, because of tax concerns. The Trustees then asked the Council on Medical Education to develop a list of possible uses of the fund and submit their recommendation to the Board of Trustees. As a result of these efforts and discussions, the Board of Trustees finally agreed on two alternatives to present to the donors. Alternative 1 would be for the fund to be placed in an interest-bearing account and the interest from the fund be used to finance the scientific program of the OSMA annual meeting each year. This would allow us to have excellent honorariums which would assist us in bringing in the best speakers possible from around the country. It is during the annual meeting each year that we feel we have the best opportunity to reach a majority of the practicing physicians from over the state. Alternative 2 would be for the fund to be transferred to create an OSMA professorship in diabetes. The funds will be matched dollar for dollar from outside sources within one year. This fund will aid in teaching students whom we hope will be better able to work with diabetes in the future.

The donors could then choose the alternative they felt most represented the original intent of their contribution. The alternative receiving the most votes would receive the entire fund. A copy of the actual letter which was sent to the donors is included in this report for your information. (Attachment I)

C. Financial Aid to Education Loan and Scholarship Fund —

Last year the House of Delegates voted to un earmark the Loan and Scholarship Fund, which had been collecting \$5.00 from each full dues paying member. Funds have been un earmarked and \$30,000.00 placed into an impaired physician fund for use if and when necessary.

RECOMMENDATIONS:

1. The OSMA continue to actively survey and resurvey institutions for continuing medical education accreditation.

2. The OSMA continue in its support and open communications with the OU Health Sciences Center.

3. The Council continue to send representatives to local, state and national meetings when appropriate.

BUDGET REQUESTS:

Accreditation surveys\$1,000.00
Educational requirements 2,000.00
TOTAL \$3,000.00

Respectfully submitted,
John R. Alexander, MD, Chairman
Frank H. Austin, MD
Michael H. Berkey, MD
Irwin H. Brown, MD
Robert J. Capehart, MD
John W. Drake, MD
Sydney A. Garrett, MD
Sam C. Jack, MD
Thomas N. Lynn, Jr., MD
Harris J. Moreland, MD
Arnold G. Nelson, MD
Lenard A. Poplin, MD
William R. Smith, MD
Jack M. Stephenson, MD
Lowell N. Templer, MD
Edward J. Tomsovic, MD
Hal B. Vorse, MD

ATTACHMENT I

Dear Dr.

In 1978 the Oklahoma State Medical Association House of Delegates approved the creation of an Endowment Fund for the purpose of financing a "Chair" in graduate medical education at the University of Oklahoma Health Sciences Center. The fund was to be raised over a three-year period, with OSMA members contributing \$200.00 each year. It was felt by experts that \$750,000.00 was necessary in order to actually endow the position.

In 1981, the end of the three-year fund raising effort, association members had contributed approximately \$110,000.00 — far short of the original goal. In addition, the House of Delegates repealed its continuing medical education requirement and University of Oklahoma Health Sciences Center officials questioned the need for a full time professor of continuing medical education.

In May, 1981, the OSMA House of Delegates instructed the Board of Trustees to devise an alternate plan on how the money should be used. The primary and unanimous concern of the Trustees was that you, as the donor, should have an opportunity to have your donation returned, since it was not to be used for the original purpose. However, we would like to remind

you that if you want your donation returned, there could be tax problems if the donation has already been written off.

The Board also felt that some individuals would prefer that the money be used in a comparable way. Therefore, if you do not wish your donation returned, we are prepared to offer you two alternatives.

Alternative 1.

The fund be placed in an interest-bearing account and the interest from the fund be used to finance the scientific program of the OSMA annual meeting each year. This would allow us to have excellent honorariums which would assist us in bringing in the best speakers possible from around the country. It is during the annual meeting each year that we feel we have the best opportunity to reach a majority of the practicing physicians from over the state.

Alternative 2.

The fund be transferred to create an OSMA Professorship in Diabetes. The funds will be matched dollar for dollar from outside sources within one year. This fund will aid in teaching students whom we hope will be better able to work with diabetes in the future.

The original goal of the endowment fund was to support continuing education for the practicing physicians of Oklahoma and to have an impact on all OSMA members. Alternative 1 would satisfy the original goal. Alternative 2 would have most of its impact on student education in a more narrow area but would result in a larger total fund being available because of the matching dollars.

In an effort to minimize the problems and insure that the maximum amount of money is best used, we ask that you vote for only one alternative. The alternative receiving the most number of votes will receive the entire fund which is not returned to donors.

In order for us to know exactly what your desires are concerning this matter, please fill out and return the enclosed card at your earliest convenience.

If you have any questions, please contact Mr Rick Ernest, Associate Director, (405) 843-9571.

Sincerely,
Elvin M. Amen, Chairman
Board of Trustees

EMA/sam

Report of the
CONSTITUTION AND BYLAWS
COMMITTEE
(APPROVED)

SUBJECT: Annual Report
PRESENTED BY: Stanley R. McCampbell,
MD, Chairman
REFERRED TO: Reference Committee I

INTRODUCTION:

The Bylaws of the Oklahoma State Medical Association specify that the duties of the Constitution and Bylaws Committee shall be to consider amendments proposed by members of the Association or by component societies to the Association's Constitution and Bylaws; and, if it so chooses, to initiate such amendments.

REPORT:

Since no proposed amendments were submitted during 1981/82, the Committee did not meet. The house-cleaning amendments adopted by the House of Delegates during the 1981 Annual Meeting had eliminated all known inconsistencies in the Bylaws.

Respectfully submitted,
Stanley R. McCampbell, MD, Chairman
Jerold D. Kethley, MD
C. S. Lewis, Jr., MD
Arnold G. Nelson, MD
James B. Eskridge, III, MD
David Browning, Jr., MD

Report of the
OKLAHOMA STATE MEDICAL
ASSOCIATION AUXILIARY
(APPROVED)

SUBJECT: Annual Report
PRESENTED BY: Sherry S. Strebel, President
REFERRED TO: Reference Committee I

The year was 1907; the month was April; the place — Shawnee in Oklahoma Territory. The occasion was the organization of the Women's Auxiliary to the Pottawatomie County Medical Society and the vote the following month to form the Women's Auxiliary to the Oklahoma State Medical Association with Mrs. W. C. Bradford, our founder and 1st State President.

The object of this pioneer organization was "to promote friendly relations among doctors' wives and to foster the interests of the medical profession." We auxiliaries of today are indeed fortunate to have had these pioneer women with their insight and fortitude to see the need for the medical auxiliary — if they could only be here today as we celebrate their 75 year anniversary — our Diamond Jubilee. Auxiliary's accomplishments would have made them proud!

Do you know what your county auxiliaries are doing? Across the state they're actively involved in promoting better health care in your communities in all sorts of ways — vision and hearing screening, health fairs, parents' assistance centers, stress seminars, parenting and many more too numerous to mention. The untold hours they give to the community can only strengthen the public view of the medical family.

On the state level, a new program was begun to reach out to the spouses of residents and students for they are the future of medical auxiliary. It is our hope that their new and fresh ideas, combined with our experience will provide for an even stronger auxiliary foundation. Through the "Sponsor a Spouse" program in our state, we have 60 resident physician spouses as members.

For the first time in many years a new auxiliary was formed in our state — Northwest Counties Chapter in the far northwest section. It's amazing to look at the similarities of their reasons for organizing this county and the original Pottawatomie County.

And what about membership? We stand at 1322 members, up 136 from last year — a strong 11½% gain — enough to win us recognition and an award at our National AMA Auxiliary Convention in June.

Traveling about the state to 15 of our 16 chapters has truly been an experience that I treasure. The support the societies give to the auxiliaries is a major factor in their involvement.

I can't say enough good things about the staff at OSMA. They are hardworking and dedicated people who have made my job one of extreme pleasure. For their support and expertise, I thank them.

And your president, Jimmy Pitts, is one among millions — to him I say "thank you" for your support and counsel when I have needed it.

And to my husband, Gary, who has shown the greatest patience with my being gone, on the phone, and not around when I know he needed me — his encouragement has made it possible to fulfill this job the way I saw fit to do it. No wife could ask for anyone greater!

On this anniversary of our Diamond Jubilee, we proclaim the honor and traditions of our past, the accomplishments and service of the present, and the aims and hopes of the future.

Auxiliary is doing great in Oklahoma!

Thank you,
Sherry S. Strebel
President

Special Report of the
PHYSICIANS LIABILITY
INSURANCE COMPANY
(APPROVED)

SUBJECT: Annual Report

PRESENTED BY: C. Alton Brown, MD, President

REFERRED TO: Reference Committee I

It is a special pleasure to report to you on this year's operations of your insurance company, PLICO. Several significant milestones were passed. 1982 marked the last assessment. Your company is now completely funded with a paid-up surplus and capital of \$3,500,000. 1982 also marked the inception of PLICO's H & A insurance program. The OSMA instructed PLICO to develop this revolutionary approach to health insurance. The Board of Trustees had two objectives in mind. The first was to establish the viability of a well-managed health insurance program applying group insurance underwriting and group insurance principles to a medical association. The second was to test the effectiveness of a non-utilization incentive, specifically, the Wellness Bonus. Today I will have the opportunity to report to you the initial response to that program, but first let me bring you up-to-date on PLICO's professional liability insurance performance.

In the most recent fiscal year, the assets of PLICO increased by over \$6,300,000. The total premium written by PLICO was \$6,869,361 for this year, 1982. The capital and surplus was increased from 1981 to January, 1982 by

\$2,350,000. The current enrollment in the H & A program will produce an annualized premium income of PLICO \$11,719,361. This makes your insurance company, by premium income measurements, the third largest casualty insurance company in the State of Oklahoma. PLICO's ratio of net premiums to surplus on 12-31-81 was 1.33 which is superior to that of the Aetna, the Travelers or the St Paul, who respectively show a premium to surplus of 1.70, 1.35 and 1.88. Your Board is indeed proud of the strong financial condition of our company and intends to continue a policy to assure that condition in years to come.

PLICO's loss experience continues to be good. Paid losses since the creation of our company on January 1, 1980 equal \$2,381,807. Reserves for the past two years total \$3,878,850. Six claims have been litigated and five cases have been won while one has been lost. The policy of the company continues to be not one penny for tribute.

While our company has passed these important milestones and increased its assets so significantly, it continues to sell an occurrence insurance policy. This is extremely important. Once you have bought PLICO's insurance forever after any claims that resulted from your medical practice while your PLICO policy was in force are covered.

St Paul is again proposing to sell a claims-made policy in Oklahoma. Don't buy a claims made policy. It only covers claims that are reported in the year the policy is in force. That means that less than one-fourth of all malpractice claims you may have are covered by the premiums you pay. If you ever want to change carriers, you have to buy your way out of the company store and they don't tell you in advance how much that will cost.

St Paul, like all claims made carriers, has a misleadingly low first year premium that swiftly escalates so that in four years, you will have paid much more than you would have paid to PLICO and yet you still only have less than half the insurance coverage. The bottom line is they sell you half a loaf for twice the cost.

Many insurance agents don't understand the claims made policy despite the fact that that is their business. There are even some who are unscrupulous enough to try to sell a claims made policy because there is a high commission in it for them. Don't be misled. Remember, PLICO is our company. All you will

ever pay to PLICO is the cost of the claims and the cost of defense. No, I didn't leave out the cost of overhead. The income from the surplus and reserves covers more than 100% of the cost of operations. In other words, every year not only all of your premium dollar, but a large part of the income generated by the surplus and capital of the company goes to pay claims and the cost of defense. With PLICO you will get 103 cents worth of insurance for every dollar's worth of premium. With any commercial carrier, St Paul, Hartford, INA, Prudential, or any other, including any sponsored plan by any professional association underwritten by a commercial carrier, the best we can hope to get is 67 to 70 cents worth of insurance for every dollar of premium you pay.

St Paul deserted Oklahoma physicians in the past. With a claims made policy, such a departure from the State by an insurer can be a catastrophe for any physician who buys their insurance.

Over the past three years the total savings to OSMA members each year in the PLICO professional liability program has been roughly \$3,500,000 a year as compared to the commercial insurance rates that Hartford or INA wanted to charge. That translates to better than \$3,000 of savings for each insured member of the Association.

The policy of the company as regards to setting of claims reserves continues to be extremely conservative. There have been some changes in the law that we regard as basically adverse but their impact has not been great enough to affect the loss experience significantly and thereby the premiums in the program have not yet reacted to them.

It is with considerable pleasure that I am able to report to you that in spite of significant increases in other insurance plans nationwide, both by commercial insurers and captive insurers, PLICO enters its third year of operation with *no increase* in rates for professional liability premiums. The goal of your PLICO Board has been to achieve the fairest distribution of savings among our members.

As most of you understand, there are not enough radiologists, cardiologists or any other specialty group in Oklahoma to make actuarially sound rates for each class of physicians from exclusively Oklahoma loss experience. However, let me emphasize that the total premium developed for Oklahoma and charged by PLICO is derived exclusively from Oklahoma

experience. The division of that premium among specialties has always been done by the use of ISO classifications. This is critical to each of us for three reasons.

If your company is to remain stable, the participation must be high. If the participation is to be high, PLICO must offer a competitive premium to every Oklahoma physician. This can only be accomplished if Oklahoma physicians are rated in the same way by PLICO as by other carriers. Secondly, if an effort were made to use the miniscule universe of any one Oklahoma specialty to try to develop a rate for that specialty, one claim could cause erratic vacillations in premium from year to year. The changes would be so dramatic that they would directly interfere with the financial planning of each of us and thirdly and most importantly, no reinsurer would accept the unreliably small numbers generated by our Oklahoma statistics and we could not offer the high limits that are so essential to protecting Oklahoma physicians today.

For these reasons, we have no choice but to use national classifications and rating techniques, but every Oklahoma physician enjoys the big premium savings that is generated by good Oklahoma loss experience. This year your Board increased the retention of PLICO on each professional liability claim. This significantly reduced reinsurance costs and increased the investable assets of our insurance company. This increase in retention was made possible by the increase in surplus and capital and the ultimate savings generated by this increase will pay us all back for the last assessment many times over in the years to come and help us to keep premiums in line as time goes by.

Now, to the H & A program. The policy was designed along the lines of competition so that we could develop a competitive rate. To begin with 1633 physicians and their families are enrolled. The total enrollment, including physicians' employees and their families is 9604. This enrollment has been achieved in only 11 weeks. The response has assured us of the need for the type of program which we developed but also questions have been raised about the benefits. If the loss experience proves good and the plan can remain competitive, coverage may be expanded to include protection that is not ordinarily offered by the competition but we must move wisely and deliberately in this direction so as not to wreck our H & A program

or endanger the assets of our professional liability company. I know the feeling of your PLICO Board is on the conservative side guaranteeing the security of the members of the Association. This puts a heavy fiduciary responsibility on us, but by the same token, it is important that we be prepared to be innovative and find ways to offer insurance to cover exposures that are not regularly insurable, such as out-patient psychiatric care. How this can be done without making the plan uncompetitive or unsound is a significant challenge, and your Board will certainly try to meet it before the anniversary of the policy.

There are other coverage questions that will have to be addressed upon the anniversary as well, but, in the meantime, the pricing is based upon actuarial work done using the form now in force. To offer additional coverage at this point would be foolhardy without raising the rates and the rates are guaranteed until the anniversary.

We are relying heavily upon the integrity of Oklahoma physicians in this program. There will be an effort to pay claims swiftly and expeditiously and initially very few billings will be challenged so I beseech you to be as fair as we believe you will be with your own company. In the long run it will help us all in lower overhead costs because by paying claims promptly and fairly, the vast amount of correspondence and administrative costs that is attendant to a challenged claim can be eliminated. We estimate that this can reduce the premium charged to Oklahoma physicians, our families and employees by as much as 11% based on our studies of commercial carriers.

Report of REFERENCE COMMITTEE II

Presented by Elaine Davis, MD, Chairman

Mr Speaker and Members of the House of Delegates, Reference Committee II gave careful consideration to the several items referred to it and submits the following report:

(1) REPORT OF THE COUNCIL ON PLANNING AND DEVELOPMENT

RECOMMENDATION:

Mr Speaker, your Reference Committee recommends that the *Report of the Council on Planning and Development* be adopted.

(2) REPORT OF THE COUNCIL ON PROFESSIONAL AND PUBLIC RELATIONS

RECOMMENDATION:

Mr Speaker, your Reference Committee commends the Council for a job well done during the last year and recommends that the *Report of the Council on Professional and Public Relations* be adopted.

(3) REPORT OF THE COUNCIL ON PUBLIC AND MENTAL HEALTH

RECOMMENDATION:

Mr Speaker, your Reference Committee recommends that the *Report of the Council on Public and Mental Health* be adopted.

(4) REPORT OF THE JOURNAL OF THE OKLAHOMA STATE MEDICAL ASSOCIATION

RECOMMENDATION:

Mr Speaker, your Reference Committee recommends that the *Report of The Journal of the Oklahoma State Medical Association* be adopted.

(5) RESOLUTIONS 5, 10, 11

RECOMMENDATION:

Mr Speaker, your Reference Committee considered Resolutions 5, 10 and 11 together because of the similarity of content. Your Reference Committee recommends that *all three resolutions be rejected and that the following substitute resolution be adopted:*

RESOLVED, that the House of Delegates of the Oklahoma State Medical Association recommend to the Board of Directors of the Oklahoma Foundation for Peer Review that it approve the participation of the Foundation in a program to provide fee-for-service review.

(6) SPECIAL REPORT OF THE OKLAHOMA FOUNDATION FOR PEER REVIEW, INC.

RECOMMENDATION:

Mr Speaker, your Reference Committee recommends that the *Special Report of the Okla-*

homa Foundation for Peer Review, Inc. be filed for information.

Mr Speaker, this concludes the Report of Reference Committee II. Your Reference Committee wishes to thank all who participated in the hearing and contributed to the preparation of this report.

Elwood Herndon, MD
David A. Ronk, MD
Bruce C. Stoesser, MD
Tim K. Smalley, MD
William O. Coleman, MD
Elaine N. Davis, MD, Chairman

Report of the
COUNCIL ON PLANNING AND
DEVELOPMENT
(APPROVED)

SUBJECT: Annual Program of Activities
PRESENTED BY: Floyd F. Miller, MD,
Chairman
REFERRED TO: Reference Committee II

INTRODUCTION:

The Council has met twice this year to review with other Council Chairmen their progress on actions taken by last year's House of Delegates and also for the purpose of planning the future activities of the Association. In addition to its charge of developing an Annual Program of Activities for consideration by the delegates, this Council is also charged with the Long Range Planning Activities of the Association. We have attempted this year to spend more time on the long-range planning process and less on the annual activities. At the last meeting it was agreed that future meetings would be issue-oriented with greater attention to the long-range interests of the Association.

**ANNUAL PROGRAM OF ACTIVITIES:
COUNCIL REPORTS:**

The Council on Medical Education recommends that the Association continue as an accrediting agency for the Accreditation Council on Continuing Medical Education (ACCME), surveying and re-surveying institutions that

conduct medical education courses. It also plans to expand and improve liaison with the Health Sciences Center and send representatives to appropriate meetings on CME.

Budget Request \$3,000.00

The Council on Professional and Public Relations plans a continuation of existing programs that includes a public opinion survey and the production of radio public service announcements. Budget Request \$24,250.00

The Council on Public and Mental Health has jurisdiction over a number of programs including environmental quality, health education, maternal mortality and perinatal health. There is also a recommendation before the House that a Sports Medicine Committee be created within this Council.

Budget Request \$2,250.00

The Council on Governmental Activities responsible for legislative and regulatory activities, plans to continue existing programs including its "Man in Washington" operation. The total cost to the Association for the Washington effort last year approximately \$25,000, which includes travel and entertainment and the consultant fee.* Council representatives made two trips to Washington and John Montgomery came to Oklahoma on three or four occasions to meet with county medical societies or the Council.

Budget request \$6,000.00

*Consultant fee not included in request.

The Council on State Legislation represents the Association at the State Capitol. They have had an unusual number of bizarre medical bills this year. The Council meets at regular intervals during the legislative session, normally at the headquarters building in the evening. The Council plans to continue its basic activities and encourages support for its resolution #14 which would encourage county medical societies to set aside one meeting per year to concentrate on legislative activities.

Budget Request \$2,000.00

The Council on Medical Services is responsible for the Association's Peer Review Program, Health Planning Activities, Physician Placement, and liaison with other health care organizations. They have been involved in Medicare reimbursement problems and recommend the creation of a Sports Medicine Committee. Their funding request is to continue existing programs.

Budget Request \$2,500.00

The Council on Members Services oversees the various benefit programs offered to Asso-

ciation members, such as insurance, travel, educational seminars, etc. They are also responsible for underwriting the physicians who apply for coverage through PLICO.

Budget Request \$1,000.00

The Council on Planning and Development meets in two-day sessions twice annually to review council activities, develop an annual program of activities, and discuss long-range objectives and problems of the Association. Lodging and meal functions attendant to the sessions are paid by the Association.

Budget Request \$4,000.00

SUMMARY:

Total Budget Request for all the Association's Councils is \$45,000. It is the opinion of the Council on Long-Range Planning and Development that these requests are consistent with programs authorized by the House of Delegates and unless modifications are made to Council reports through reference committee hearings or House action, this annual program of activities should be approved.

Respectfully submitted,

Floyd F. Miller, MD

Chairman

Report of the
COUNCIL ON PROFESSIONAL
AND PUBLIC RELATIONS
(APPROVED)

SUBJECT: Annual Report

PRESENTED BY: M. Joe Crosthwait, MD,
Chairman

REFERRED TO: Reference Committee II

INTRODUCTION:

The Council on Professional and Public Relations is responsible for the internal and external communications program of the Oklahoma State Medical Association. The overall goals of the council are (1) to improve and maintain communication and understanding among Oklahoma physicians, their patients, and the public and (2) to keep members in-

formed about programs, policies, and activities undertaken by the association and by other organizations affecting the practice of medicine in Oklahoma.

REVIEW OF ACTIVITIES:

During the past year the public relations and professional relations programs have concentrated on four areas: use of mass media to reach the public; sponsorship of public and community service projects; improvement of internal communications and membership service; and improvement of media relations. All activities were conducted in accordance with the general program approved by the House of Delegates in 1981.

As a result of a vacancy on the OSMA staff from July to October 1981, some council activities did not get under way until late in the year. Since that time, however, the council has made significant progress in carrying out its agenda of programs.

Several of the recommendations approved for 1981-82 either were not implemented or were discontinued for good reason. These include the media recognition award, the dinner meetings with media representatives, and the Burroughs-Wellcome radio interview series. Plans for the coming year incorporate similar activities, but in a somewhat different format.

Here are the accomplishments of the council in the four areas mentioned:

1. *Use of mass media to reach the public:* The council approved OSMA sponsorship of "HealthBeat," a monthly health news magazine show on KWTB, channel 9, in Oklahoma City. "HealthBeat" features timely health news, profiles of newsmakers, and medical advice and opinion. It is hosted by Dr Timothy Johnson of ABC-TV's "Good Morning America." OSMA's public service announcements are shown during commercial breaks. The show is scheduled to air once a month through October, 1982.

Two new public service announcements (PSAs) authorized by the council were completed in March and are now being shown on stations in the Oklahoma City area. They will be shown in the Tulsa area, and elsewhere around the state, beginning in June. The PSAs deal with patient compliance in taking medication and sound and sensible dieting. They were very well received by the television stations' public service directors, who commented on the

excellent presentation of the subject matter and the highly professional quality of the spots.

Because of the escalating costs involved in producing high quality PSAs, the total cost of the project (\$18,000) was more than originally anticipated. However, resale to other state societies should help recoup the additional expenditures. Several state societies that purchased PSAs produced over the past few years already have inquired about the new ones. Sales of the other spots to two state societies brought in another \$1,000 in 1981-82. OSMA has a tentative agreement from KTVY-channel 4 to air five-second public service spots as a lead-in to the 10:00 PM news. The spots will feature the OSMA logo and name and will include a brief medical message. They are scheduled to air during the month of May. This amounts to considerable free prime time exposure for the association.

2. Sponsorship of public and community service projects:

The council authorized OSMA to contribute to several projects designed to protect and enhance the well-being and safety of the public. In March of this year, OSMA participated in the KBYE child safety/safe driving campaign. In April the association served as a sponsor of the Annual Easter Party for children organized by Oklahoma Prevention of Child Abuse.

The financial contributions made to these projects were small (\$300); the returns, however, were large, both in terms of the public's benefit and in terms of the association's public service image.

3. Improvement of internal communications and membership service – The council gave its approval to establishing a regular schedule for publication of the *OSMA News*. The newsletter now goes to OSMA members every month, keeping them up to date on the association activities. The council also endorsed the concept of improved news coverage in the *OSMA Journal*. The *Journal's* news section was expanded to include more information about OSMA policies and programs as well as news from sources outside the association.

In the membership service area, the council authorized production of three new brochures in the Medical Update series. The new brochures deal with sound and sensible dieting, patient compliance in taking medication,

and dangers of overexposure to the sun. The brochures were completed in March and are now being sent to members (upon request) for distribution to patients. This series continues to be a popular item with both physicians and their patients.

4. Improvement of media relations – The council endorsed efforts to encourage a better working relationship with the media through increased personal contact and cooperation with media representatives. Substantial progress has been made in both radio and television as a result of providing sponsorship for public service projects and health-related broadcasts, prompt replies to media inquiries, and assistance in obtaining physicians for news interviews and public affairs shows.

This approach has also been helpful in improving relations with the print media; however, the extraordinarily high turnover of reporters on the major state newspapers makes it more difficult to maintain a continuing rapport with the individuals assigned to cover medical news.

OBJECTIVES:

The Council on Professional and Public Relations has formulated a set of objectives designed to meet the goals stated earlier in this report. To accomplish these objectives, the council requests that the activities listed in the recommendations section of this report be approved. A description of these objectives and recommended activities follows.

1. Objective: Ascertain the attitudes and perceptions of Oklahomans toward the medical profession and key health care issues. The council recommends that OSMA join with the American Medical Association in conducting a survey of public opinion on such issues as competition, medical education, physician advertising, new practice forms, proposed changes in health insurance, and satisfaction with the physician-patient relationship. The AMA's Survey and Opinion Research Office would work with OSMA to develop questionnaire content and to incorporate into its survey sample an expanded subset of the Oklahoma population. This would enable OSMA to obtain in-depth information on public opinion within the state. Such information can be used for a variety of purposes — to define the profession's image problems and serve as a basis for developing image-enhancement programs; to pinpoint areas where physicians and the public

hold either coincident or divergent viewpoints; to provide feedback to OSMA members concerning the public's view of the physician-patient relationship; to predict public reaction to OSMA positions on public policy and legislation; and, finally, to provide a concrete means for measuring changes in public opinion on key health care issues.

It is important to note that the cost to conduct such a survey in conjunction with the AMA is minimal compared to what it would be if attempted by OSMA independently.

2. Objective: Continue to communicate to the public the benefits of developing good health practices and the dangers inherent in ignoring their health needs. The council recommends that this kind of information be conveyed in two ways — publicly by OSMA through a series of radio public service announcements and personally by physicians through a new series of Medical Update brochures.

The radio PSAs would replace the defunct Burroughs-Wellcome interview series. Research shows that 60-second radio spots are more popular with stations than segments that run substantially longer (five minutes for Burroughs-Wellcome).

The Medical Update series continues to be a relatively inexpensive and informative medium for communicating important medical information to patients. Subjects for the new series would be selected and approved by the council.

3. Objective: Continue to enhance the association's image and contribute to the public's well-being through sponsorship of community service projects. The council recommends that OSMA continue its financial support of community service projects, such as the Oklahoma Prevention of Child Abuse Annual Easter Party for children. OSMA receives favorable publicity through such sponsorship while providing a worthwhile service to those who benefit from the projects. The council recommends that OSMA select a maximum of four community service projects for sponsorship during 1982-83.

4. Objective: Improve relations with media representatives and encourage more positive and informative press coverage. The council recommends that OSMA sponsor a reception for the media in conjunction with the annual convention of the Oklahoma Press Association.

This would allow media representatives and OSMA officers and staff to become better acquainted and to meet informally to discuss substantive medical issues.

5. Objective: Establish better lines of communication between OSMA and medical students and encourage student interest in joining the association. The council recommends that OSMA work with medical school faculty and students to begin closing the communication gap that exists between organized medicine and the student population. OSMA needs to develop a formal program, including both professional and social activities, to provide students with information about OSMA, to discern student attitudes toward organized medicine, to bring practicing physicians and students together for round-table discussions, and to facilitate information exchange between OSMA and the student population. Such a program would contribute not only to better understanding among those involved but also to increased interest among students in becoming active members of the association.

6. Objective: Promote a closer, more cooperative relationship between individual physicians and their patients. To improve communication and understanding between physicians and patients, the council recommends that OSMA develop a prototype patient information brochure that would serve as a comprehensive guide to physicians in preparing their own individual practice brochures. The prototype brochure would include a sample cover design, recommendations for format and typefaces, and suggestions for content and organization.

To complete the exchange of information between doctor and patient, the council recommends that OSMA develop a patient survey form for physicians to distribute to their patients. Survey results would provide OSMA members with feedback on patient's attitudes toward the physician, office staff and the office policies and procedures.

7. Objective: Provide OSMA members with up-to-date information on scientific, legal, and professional developments, both within and outside the association, that affect the practice of medicine. The council recommends that OSMA continue to publish the *OSMA Journal* and the *OSMA News* on a regular monthly basis in order to keep members fully informed about developments in the medical profession. The council also recommends that the OSMA director of communications be permitted to

contract for freelance services from local writers qualified to develop feature articles for the *Journal*, for special OSMA publications, or for major newspapers in the state. Prior approval by the council would be required before a contract agreement could be made.

H. Craig Pitts, MD
Alvin Rix, MD
Armond Start, MD
Robert J. Weedn, MD
Kenneth W. Whittington, MD
Milton Workman, MD
Anita H. Delaporte, Staff

RECOMMENDATIONS:

Specific recommendations of the Council on Professional and Public Relations for the 1982-83 year, along with budgetary requirements, are as follows:

- A. Conduct OSMA/AMA survey of Oklahoma public opinion on health care issues\$ 5,000.00
 - B. Production of radio public service announcements (3)3,500.00
 - C. Production of Medical Update brochures (3)1,000.00
 - D. Sponsor community service projects (4)1,000.00
 - E. Sponsor reception for media during OPA convention500.00
 - F. Develop and conduct OSMA student communications program1,500.00
 - G. Produce prototype patient information brochure2,250.00
 - H. Produce patient survey form1,250.00
 - I. Publish OSMA News (12 issues) .5,000.00
 - J. Contract with freelance writers for special features750.00.
 - K. Educational activities and professional dues2,500.00
-
- \$24,250.00

L. The contingency fund established by the association several years ago and later earmarked for a campaign against passage of national health insurance totals about \$35,000. It is being held in an interest-bearing account. The council recommends that the fund continue to be held in the account.

Respectfully submitted,
M. Joe Crosthwait, MD, Chairman
Howard A. Bennett, MD
John Bozalis, MD
Jerry L. Bressie, MD
John R. Christiansen, MD
Richard Marshall, MD
Paul E. Massad, MD
Mary Anne McCaffree, MD
Houston F. Mount, MD
Thomas E. Nix, Jr., MD
Ralph Payne, Jr., MD

Report of the
COUNCIL ON PUBLIC AND MENTAL
HEALTH
(APPROVED)

SUBJECT: Annual Report
PRESENTED BY: Chester L. Bynum, MD,
Chairman
REFERRED TO: Reference Committee II

INTRODUCTION:

It is the goal of the Council on Public and Mental Health to provide the citizens of this state as well as OSMA members with timely information regarding the medical aspects of public and mental health and to conduct and oversee needed programs in these areas.

REVIEW OF ACTIVITIES:

The activities of the Council on Public and Mental Health for the 1981-82 year were largely determined by the report of the council which was approved by the House of Delegates in May of 1981, and by the committees which operate under the council's guidance. The following is an update on the approved program for the Council on Public and Mental Health and the committees which operate with the council's direction.

A. *Committee on Environmental Quality* — The Committee on Environmental Quality met once during the organizational year and considered a number of environmental issues including the standards of drinking water, a copy of OSMA Resolution Number 22 was forwarded to the EPA for their information. The council also discussed the Clean Air Act and provided testimony, which was presented by Dr George Kamp, Tulsa, at a public hearing earlier this year. (ATTACHMENT I)

The committee has also worked very closely with the Oklahoma State Department of Health and continues to be updated on vital health issues which have a direct bearing on the practice of medicine in Oklahoma.

B. *Health Education* — Last year this council reported on its activities in conjunction with

the Oklahoma Health Education Advisory Council. As you will recall, that coalition was responsible for legislation entitled "The Comprehensive Health Education Act (SB 136)," which was changed by the legislature to the point where they actually received only enough money to try some pilot projects in the state this year. The Health Education Advisory Council is still operating but seems to be having problems in trying to find its direction.

C. *Maternal Mortality Committee* — This committee is established by an Oklahoma Statute and operates independently from our council and the association. A committee report is attached as an addendum.

D. *Perinatal Task Force* — In the past, this committee has been representative of a number of health care organizations and the OSMA has provided some financial assistance for postage and mailing supplies. It is anticipated that this committee could become much more active and the council would like to leave its options open to assist it as it can if needed.

E. *Other Action* — The shortage of psychiatrists which was discussed at last year's meeting is still an item which the council will continue to work with and hopefully something can be done to increase the numbers and help relieve this problem.

The council, particularly the Committee on Environmental Quality, is responsible for the portion of this year's scientific program entitled "Women in the Workplace: Should Management Be Permitted to Exclude Women from Certain Jobs?"

RECOMMENDATIONS:

A. Committee on Environmental Quality	\$ 500.00
B. Maternal Mortality Committee	250.00
C. Other Council Programs and Internal Education Programs	1,500.00
TOTAL	\$2,250.00

Respectfully submitted,
 Chester L. Bynum, MD, Chairman
 Betty Conrad, MD
 Gordon H. Deckert, MD
 Sara DePersio, MD
 Hayden H. Donahue, MD
 Jodie L. Edge, MD
 George B. Gathers, Jr., MD
 Mark R. Johnson, MD
 Mark A. Kelley, MD

Joan K. Leavitt, MD
 Bertha M. Levy, MD
 Patricia McKnight, MD
 Edward K. Norfleet, MD
 George W. Prothro, MD
 David S. Sholl, MD
 Adolph N. Vammen, MD
 Robert Weinecke, MD

ATTACHMENT I

Policy Statement on the Reauthorization
 of the Clean Air Act
 Presented By George H. Kamp, MD

The adverse effects of air pollution on human health are documented.

The Oklahoma State Medical Association, with a membership of 3500 physicians in the state of Oklahoma, has been encouraged by the progress made to date as a result of the Clean Air Act of 1970.

We urge continued research related to delineation of the relationship of pollutants and health and development of practical methods of pollution control.

The Oklahoma State Medical Association supports the reauthorization of the Clean Air Act and opposes any weakening of the act which would result in increased ill effects of pollution.

Report of the
JOURNAL of the
Oklahoma State
Medical Association

An Addendum to the Report of the
 Council on Professional and
 Public Relations
 (APPROVED)

SUBJECT: Annual Report
 PRESENTED BY: Mark R. Johnson, MD,
 Editor
 REFERRED TO: Reference Committee II

The *Journal of the Oklahoma State Medical Association* continues to be one of the most popular, tangible benefits of membership in the association. Its breadth of scientific information, along with timely news reports of OSMA activities and developments in the legal, political, and professional arenas, pro-

vides a wealth of knowledge for the physician members of the association.

The Editorial Board plans to make some minor design changes in the *Journal* during the coming year and to expand the *Journal's* coverage of leaders in medicine and of controversies confronting the medical profession.

The changes in design will be aimed at improving the readability of lengthy articles and providing a clearer guide to article content.

The series on "Leaders in Medicine" will continue, with consideration given to featuring lay persons who have made significant contributions to medicine. The focus on controversial issues is expected to stimulate reader interest, to elicit "grass-roots" reaction and response, and to inform readers about the positions physicians are taking on issues that affect the practice of medicine. A readership survey may be conducted in conjunction with the series on controversies.

The Editorial Board will continue its strict oversight of the *Journal* to ensure the continued high quality of all published material.

Winners have been selected by the board to receive the Charlotte S. Leebron Memorial Trust award and the runner-up award from the Sandoz Medical *Journal* account.

Jean Pitts, MD, author of "Percutaneous Transluminal Angioplasty and Recanalization in the Treatment of Peripheral Vascular Disease," will receive the first-place award for scientific contributions from the Charlotte S. Leebron Memorial Trust. William A. Miller, MD, will receive the Sandoz runner-up award for his article "Postoperative Wound Infection in Orthopedic Surgery." Awards will be presented during the 1982 annual meeting.

To partially offset a 10 percent increase in production costs of the *Journal*, the Editorial Board voted to raise advertising rates by 10 percent. The board also voted to raise the miscellaneous ad rate from \$7.50 to \$10 per column inch and the professional card rate from \$35 to \$50 a year per one-half inch increment.

Respectfully Submitted,
Mark R. Johnson, MD
Editor-in-Chief

Harris D. Riley, MD
Editor

Robert G. Tompkins, MD
Editor

Solomon Papper, MD
Corresponding Editor

Special Report of the
OKLAHOMA FOUNDATION
FOR PEER REVIEW, INC.
(RECOMMENDED THAT REPORT BE
FILED FOR INFORMATION)

SUBJECT: Annual Report

INTRODUCED BY: H. W. Harnish, DO, President, Enid, Oklahoma Foundation for Peer Review

REFERRED TO: Reference Committee II

During the past year the Oklahoma Foundation for Peer Review has carried out the tasks of a Professional Standards Review Organization using the review concepts developed under the Oklahoma Utilization Review System known as OURS. While some adjustments were made when the Foundation ended the OURS Program and became the PSRO for the State of Oklahoma, the Foundation has maintained its original approach.

Recently the Foundation expanded on the original OURS approach by introducing a new status called, "Exempt Status." This new status will allow certain hospitals in the state who have had excellent track records to eliminate concurrent review entirely. Approximately 18% of the hospitals will fall into this category during the year. The Exempt Status allows hospitals to operate on a retrospective basis except in instances where Staff Monitoring of a particular physician is necessary or when certain Foundation objectives must be pursued. Hospitals who are now on Exempt Status expressed strong approval for this approach.

During 1981 the Foundation underwent another evaluation by the Department of Health and Human Services. Because the Department failed to correctly fill out the Foundation's questionnaire, the Foundation was placed on a proposed termination status. The Foundation, subsequently, appealed this ruling. The appeal revealed several items for which the Foundation should have been given credit. As a result the Department reversed its ruling and decided to continue the grant for doing PSRO review with the Foundation.

The Foundation is, once again, undergoing an evaluation this year. The results of this evaluation will not be made until July, 1982.

The Reagan Administration has proposed that the PSRO and Utilization Review Programs, currently in effect for all Medicare and Medicaid patients, be eliminated from the

Medicare/Medicaid Program. It has suggested an alternative type of review which relies entirely upon the Fiscal Intermediary and gives very strong powers to that entity to cut costs and utilization. During the last session of Congress, the Administration's proposal to eliminate PSRO and Utilization Review was rejected but the outcome this year is not yet known.

The Foundation has been approached by an outside group regarding some type of data collection/private review program. Formal inquiries from a group in Tulsa entitled the Tulsa Business and Medicine Coalition, have been made. The Foundation received a direct inquiry from the Coalition at one of their Board meetings in early 1982. While the Foundation listened intently to the proposal, it has not gone forward with any formal action, awaiting the outcome of a resolution by the Tulsa County Medical Society to the OSMA House of Delegates.

The Foundation has never received a final document from SysMetrics, the company which has been evaluating the OURS Program. A draft was received last year but was declared unacceptable by the Department of Health and Human Services.

Report of REFERENCE COMMITTEE III

Presented by Raymond L. Cornelison, Jr., MD, Chairman

Mr Speaker and Members of the House of Delegates Reference Committee III heard testimony and considered several items referred to it and submits the following report:

(1) REPORT OF THE COUNCIL ON GOVERNMENTAL ACTIVITIES

RECOMMENDATION:

Mr Speaker, your Reference Committee recommends that the *Report of the Council on Governmental Activities* be adopted.

The report of the Council on Governmental Activities outlines projects undertaken by this council which indicates the great amount of work done by the members.

(2) REPORT A OF THE COUNCIL ON GOVERNMENTAL ACTIVITIES

RECOMMENDATION:

Mr Speaker, your Reference Committee recommends that *Report A of the Council on Gov-*

ernmental Activities be adopted and that the council continue its study of this proposal.

Report A of the Council on Governmental Activities represents the great deal of work on the part of Perry Lambird, MD, along with his council members. Your Reference Committee would like to commend Dr Lambird for his time and effort expended in developing this report. The Reference Committee is aware that this report is a very innovative approach to dealing with medicare reimbursement and understands the Oklahoma Congressional delegation was also appreciative of the council efforts.

(3) REPORT OF THE COUNCIL ON STATE LEGISLATION

RECOMMENDATION:

Mr Speaker, your Reference Committee recommends that the *Report of the Council on State Legislation* be adopted.

Your Reference Committee was impressed with the amount of time and involvement by the chairman and members of this council in dealing with a multitude of medical legislative issues.

(4) REPORT OF THE COUNCIL ON MEDICAL SERVICES

RECOMMENDATION:

Mr Speaker, your Reference Committee recommends adoption of this *Report of the Council on Medical Services*.

Specific comments centered around the work of the Appropriateness Review Committee and considerable discussion on Section E of the report dealing with single statewide reimbursement.

Special notice is given to the detailed report of the Physician Manpower Training Commission. Reference Committee III extends its appreciation to the council chairman and members for their diligent work.

(5) REPORT OF THE COUNCIL ON MEMBERS SERVICES:

RECOMMENDATION:

Mr Speaker, your Reference Committee recommends adoption of the *Report of the Council on Members Services*.

It is evident to the Reference Committee that the Council on Members Services is involved in many programs that are of specific interest to the members of the Oklahoma State Medical

Association, example: new employee seminars and the booklet on selected Oklahoma statutes. Your Reference Committee would like to commend the members of this council for their fine work.

(6) REPORT OF THE AD HOC COMMITTEE ON MEDICAL MALPRACTICE

RECOMMENDATION:

Mr Speaker, your Reference Committee recommends that the *Report of the Ad Hoc Committee on Medical Malpractice* be adopted.

The Reference Committee was made aware of the potential malpractice crisis in the near future and commends the Oklahoma State Medical Association Board of Trustees for their insight in selecting a committee to study this issue.

(7) RESOLUTION #1 — MEDICAL ORDERS BY NON-MEDICAL PERSONNEL

RECOMMENDATION:

Mr Speaker, your Reference Committee recommends that *Resolution #1* be rejected and the following substitute be adopted.

RESOLVED, that the Oklahoma State Medical Association initiate a cooperative study committee with the Oklahoma State Nursing Home Association, the Department of Human Services, and the Oklahoma State Department of Health, to educate non-medical personnel as to the laws and regulations governing the ordering and distribution of medication in long-term care facilities in Oklahoma.

(8) RESOLUTION #2 — NON-DISCRIMINATORY HEALTH CARE REIMBURSEMENT

RECOMMENDATION:

Mr Speaker, your Reference Committee recommends that *Resolution #2* be referred to the *PLICO* Board for disposition, recognizing that this problem is under study.

Your Reference Committee heard considerable testimony on this item from the attendees as well as a representative of *PLICO*.

(9) RESOLUTION #3 — ASSIGNMENT OF BENEFITS

RECOMMENDATION:

Mr Speaker, your Reference Committee recommends that *Resolution #3* be approved.

Your Reference Committee makes a note that this resolution refers *only* to private in-

surance and *not* assignment of Medicare or Medicaid.

(10) RESOLUTION #7 — VOLUNTARY REPOSITORY FOR ADVERSE REACTION TO DRUGS

RECOMMENDATION:

Mr Speaker, your Reference Committee recommends adoption of *Resolution #7*.

(11) RESOLUTION #9 — APPROPRIATE AND EQUITABLE MEDICARE/MEDICAID REIMBURSEMENT

RECOMMENDATION:

Your Reference Committee recommends adoption of *Resolution #9*.

(12) RESOLUTION #13 — CLEAN AIR ACT

RECOMMENDATION:

Your Reference Committee recommends that *Resolution #13* be adopted.

(13) RESOLUTION #14 — COUNTY MEDICAL LEGISLATIVE MEETINGS

RECOMMENDATION:

Mr Speaker, your Reference Committee recommends that *Resolution #14* be adopted.

(14) OMPAC BOARD AND RESOLUTION #15 — INCREASE OF OMPAC MEMBERSHIP

RECOMMENDATION:

Mr Speaker, your Reference Committee recommends adoption of the *OMPAC* report and *Resolution #15* be adopted.

Your Reference Committee was appalled at the low membership in *OMPAC* (only 13% of the Oklahoma State Medical Association members belong to *OMPAC*).

In light of the continued legislative involvement in the practice of medicine, your Reference Committee would like to go on record as unanimously supporting this report and resolution and strongly urges all members of this astute body to become *OMPAC* members and strengthen the political voice of medicine.

Raymond L. Cornelison, Jr., MD, Chairman
Thomas L. Ashcraft, MD
William G. Bernhardt, MD
Harriet J. Coussons, MD
Jim D. Dixon, MD
Charles R. Gibson, MD
Michael Z. Rickman, MD
Boyd O. Whitlock, MD
Richard L. Winters, MD

Lyle Kelsey, Staff
Linda Cotten, Staff

Report of the
COUNCIL ON
GOVERNMENTAL ACTIVITIES
(APPROVED)

SUBJECT: Annual Report
PRESENTED BY: Perry A. Lambird, MD,
Chairman
REFERRED TO: Reference Committee III

INTRODUCTION:

The Reagan Administration, national legislative leaders and health policy makers have all served notice on the medical profession that major revisions will be made in federally financed and controlled health programs. However, as yet, no consensus has developed. In fact, there seems to be general confusion and erosion of previously announced policy decisions.

OSMA's reaction to developing health policy is based upon a number of actions taken at previous meetings of the House of Delegates and Board of Trustees. The Association communicates its position on health issues to the Oklahoma Congressional Delegation through its officers, the Chairman of this Council, its "man in Washington", John Montgomery, and through the AMA Washington staff. Because of the ever-changing nature of medical issues on the national scene and because of the absence of specific legislation it is difficult to assess the effectiveness of the past year's activities. Perhaps a positive summary of "nothing bad has happened to us yet" best sums up the Council's scoreboard. It should be noted, however, that the Association's rapport with our national representatives is extremely cordial. We have personally met with all our Representatives and Senators on two or more occasions in the past year. We have offered constructive suggestions and alternatives which have been well received and appreciated and we have avoided at least thus far the "we're agin it" syndrome that has so often characterized medicine's position on national issues.

This report reviews major activities of the Council and summarizes the Council's requests for next year's program.

REVIEW OF ACTIVITIES:

At an early meeting of the Council last year,

following repeated requests for solutions to the rapid escalation of medical care costs, the Council voted to draft constructive alternatives to the existing Medicare program.

The Oklahoma Medicare Experiment is an attempt to localize the reimbursement program for over age 65 beneficiaries and to transfer the administration of the program to private carriers under supervision of a medically-dominant group. There would be substantial restructuring of the deductible and co-insurance provisions but no changes in the benefit plan and there would be a "wellness bonus" similar to that offered in PLICO HEALTH.

Basically, the plan would transfer from Social Security the average per capita expenditure plus administrative costs of each Oklahoma Medicare recipient to an Oklahoma entity that would create a trust fund for each Medicare beneficiary. A front-end deductible would be established that equals the average out-of-pocket cost per Medicare patient plus the total of the average standard Medicare deductible per person. After the deductible is satisfied, the plan would pay 100% of the medical costs. Any person who did not use benefits during the one-year experimental period would receive a \$200 "stay well" bonus. Interest less expenses would accrue to the individual trust account. Upon death, the balance of the trust account would revert to the Social Security Administration. There would be peer review performed by the professional associations and the Oklahoma Foundation for Peer Review. Obviously, there are many other details to the proposal but these are the essential points. The basic ideas are local administration, review by professionals, close fiscal control and a simplified deductible. It is doubtful with the current attitude of the Congress that we will be approved to try the experiment. But, at least an alternative was proposed that was a reasonable solution. Research on the program continues in the Congressional Budget Office at the request of several of our Representatives.

SUPPORT FOR FUNDAMENTAL BIOMEDICAL RESEARCH:

At one of our Council meetings, it was pointed out that there have been major cut-backs in the financing of basic medical research. Realizing the time lag between scientific discovery and clinical application and the enormous contributions made in patient care through research, we have encouraged our

Senators and Representatives to study the research cutbacks and consider reducing, if necessary, contractual-applied research rather than project grants and support of career investigators.

COMPETITION:

The administration has plans to restructure the medical care delivery system by introducing more competition into the medical market place. It has been extremely difficult to acquire the specifics of these proposals. In some cases we are informed that there will be new innovative ideas, others reveal a re-hash of old proposals conceived and attempted by past administrations. Rather than comment on non-specific concepts, the Council suggested to the Oklahoma Delegation that they not support proposals that 1) require employers to offer HMO options; 2) mandate catastrophic benefits; 3) proposals that pre-empt state law, or 4) programs that increase the regulatory burden. Rather, we suggested they support equal treatment of providers/plans; and local or regional experiments prior to making structural changes nationally.

HEALTH PLANNING ACT REPEAL:

The Council has repeatedly urged the repeal of the National Health Planning and Resource Development Act on the basis that it has impeded medical progress and unnecessarily added to the cost of medical care while demonstrating no measurable benefit.

PSRO REPEAL AND DEFUNDING:

In a letter to the Delegation, the Council stated "We support the repeal of PSRO laws/funding as the program is currently constituted. It has been effectively federalized, encrusted with elaborate and costly bureaucratic requirements which yield no benefits, and made into an ineffective shadow of its initial promise".

FEDERAL TRADE COMMISSION RESTRICTIONS:

Two laws pending in the Congress would restrict the FTC's authority over the learned professions. The Council supports the restrictions on the basis that they are state regulated through state licensing laws and shouldn't come under federal jurisdiction. Further, under FTC ruling, they are prohibited from self-regulation through peer review.

COMPETITIVE BIDDING:

The Medicaid law was changed in the last Congress to permit competitive bidding of medical services. The Council supported the "freedom of choice" concept and opposed competitive bidding of physician services. There is now under consideration extension of the bidding concept to Medicare beneficiaries, which the Council strongly opposes.

OTHER POSITIONS:

The Council also went on record: *supporting* new definitions for physician independent contractors which would accommodate the unique characteristics of some physicians, ie, emergency room physicians; *supporting* regulatory reform measures that equalize the positions of a federal agency and a complainant in judicial proceedings; *supporting* the equal treatment of all physicians in Medicare reimbursements by permitting the right to bill patients direct.

SUMMARY:

The Council has had an active year and it appears there will be little change in the future. The uncertainty of the economy and the lack of a specific Reagan Health program is certain to generate more pressures on the medical care industry. It is imperative that our views be expressed early in the development of legislative programs and it is equally important that we know with clarity the positions that accurately reflect the opinion of Oklahoma physicians. The Council plans to improve its policy-making mechanisms and urges the House of Delegates to communicate its feelings to the Council Chairman and officers of the OSMA.

We would also like to report that while there was some concern at the outset of our Washington program five years ago that we might conflict with AMA positions on National Health issues, that has not occurred. Only once have we taken a position contrary to AMA's and that clearly was the desire of the OSMA officers and membership (incidentally, the OSMA position prevailed). The AMA leadership has agreed that the OSMA program is complimentary to the AMA's national effort.

CONCLUSION AND RECOMMENDATIONS:

Basically, the Council recommends that its program be continued, including the "man in Washington" and periodic trips to confer with the Oklahoma Delegation; that we be permit-

ted to develop health policy positions and alternatives consistent with OSMA policy for presentation to our US Senators and Representatives.

Report of the
COUNCIL ON
GOVERNMENTAL ACTIVITIES

REPORT A

SUBJECT: Alternative Insurance Proposals
INTRODUCED BY: Perry A. Lambird, MD,
Chairman

The report of the Council on Governmental Activities refers to a *Medicare Experiment* that has been developed in conceptual form and presented to members of the Oklahoma Delegation. Representative James Jones requested that we expand the concept to include Medicaid and non-governmental purchasers of health insurance. Attached are a series of proposals that would accomplish Rep. Jones' request.

As mentioned in the Council report, these are conceptual proposals and there are many details that must be developed and refined.

The Council requests that these reports be approved in principal, permitting us the opportunity to continue to pursue their implementation.

Supplemental Report of the
COUNCIL ON
GOVERNMENTAL ACTIVITIES
EXECUTIVE SUMMARY
(APPROVED)
OKLAHOMA HEALTH INSURANCE
PROPOSALS

The Oklahoma State Medical Association has developed a series of proposals for health insurance covering Medicare and Medicaid recipients and private individuals. If enacted, we believe two goals are achievable: a) a 20-30% reduction in "health care" expenditures; and b) self-funding of Medicare trust funds at any mix of population age.

Each proposal has features designed to discourage excess utilization and duplicate coverage. Each uses true peer review to determine the necessity and reasonableness of services. Each proposal also provides for the creation of trust accounts for each insured which will: a) ultimately fully fund each individual's health

insurance; b) lower administrative costs; c) ultimately enrich the US Treasury; and d) provide critically needed capital to banks and savings institutions on an immediate basis.

Finally, these proposals provide a full spectrum of health insurance coverage for each individual insured, while effectively eliminating both regulatory and expensive administrative overhead.

We know of *no* competing proposal with this wide a range of potential benefits and believe it deserving of both scrutiny and active support.

A PROPOSAL FOR AN EXPERIMENT IN
HEALTH INSURANCE FINANCING
FOR OKLAHOMANS

PART I. General Medicare Beneficiaries

A. Target Group

All Medicare beneficiaries with Oklahoma addresses and enrolled in Medicare Part A and Part B on January 1 of the calendar year following enactment of permissive legislation or six months after enactment of such legislation, whichever is greater.

B. Control Group

All similarly situated beneficiaries in surrounding states.

C. Experimental Financing Method

1. HCFA will compute for Medicare beneficiaries in Oklahoma for the most recent 12 month period:
 - a. the average per capita expenditure of HCFA funds per beneficiary under Part A and Part B including all costs external to Washington and regional HCFA offices;
 - b. the average per capita deductible, co-insurance payments and premiums, if any, for Part A made by beneficiaries and the amount anticipated for each 12 months of operation of the experimental periods;
 - c. the anticipated beneficiary premium and co-insurance payments for Part B for each 12 months of the experimental periods.
2. HCFA will pay to a carrier or consortium of carriers selected jointly and unanimously by HCFA, the Oklahoma State Medical Association, the Oklahoma Osteopathic Association, and the Oklahoma Hospital Association in monthly installments in advance:
 - a. 1/12 of the amount computed under 1. a. times the number of beneficiaries in-

creased by the anticipated increase in the medical and hospital services component of the CPI for the plan year over that of the year of computation.

3. The carrier will:

- a. contract with the Oklahoma Foundation for Peer Review for utilization, quality, and claims review, determination of the necessity and reasonableness of expenditures, and application of prudent buyer concepts;
- b. reinsure as prudent for catastrophic costs;
- c. provide each target group beneficiary the Medicare policy outlined below;
- d. administer claims payment;
- e. administer trust accounts, as outlined below;
- f. provide information and assistance to beneficiaries and providers;
- g. such other duties as are normally incumbent upon or required by law of health insurers;
- h. appoint a coordinating advisory council to be composed of one member of each organization listed in C, 2, upon nomination by each individual organization of a proposed organizational representative, which shall oversee all plan activities.

4. HCFA will:

- a. establish an ongoing financial audit of both the target and control groups so as to provide data to Congress on at least an annual basis of comparative program costs;
- b. provide a special Medicare card for beneficiaries in the experimental group.

D. *The Experimental Medicare Policy will provide:*

1. all medical and hospital services funded by Medicare for beneficiaries in the control group;
2. that each beneficiary will sustain each year a deductible equal to the sum of the per capita expenditures for Parts A and B computed under C.1b and C.1c, adjusted to the current plan year; but that no premium payments shall be required of the beneficiaries;
3. that each beneficiary who has paid the deductible computed under D.2 will be reimbursed by the plan up to the maximum liability of Medicare for beneficiaries in the control group, subject to the proviso of D.4;

4. that each beneficiary who elects *not* to present a claim for services billed in a 12 month plan period may file a "Stay-Well Bonus Request" form furnished by the carrier and shall receive a stay-well bonus of \$200* payable 105 days after the close of the plan year (all claims must be presented within 60 days after the close of the plan year) from his or her trust account.

*adjusted each year for changes in the Consumer Price Index.

E. *Trust Accounts*

From a portion of the sums received from HCFA, the carrier shall establish in federally insured banks, credit unions, or savings institutions with head offices in Oklahoma, which have agreed to service such accounts at no additional fee, master trust accounts with individual sub-accounts which shall pay interest on such accounts at least monthly at an interest rate not less than the average rate on 90-day US Treasury Bills at the last auction of the preceding month. The bank, credit union, or savings institution shall:

1. At the direction of the carrier:

- a. withdraw from the trust account and mail to the qualifying beneficiaries the \$200 stay-well bonus together with a letter from the carrier to the beneficiary;
- b. withdraw on demand of the carrier any sums required by the carrier to meet claims paid and to be paid for an individual beneficiary by the carrier provided that such sums in any plan period cannot exceed the deposits made by the carrier during the applicable plan year;

- c. at termination of the trust by virtue of death of the beneficiary or termination of the experimental program, close the trust account and provide to the carrier a check for the outstanding balance of the account made out to the US Social Security Administration, the Administration to deposit said check in a separate, interest bearing trust account dedicated to future financing of this program.

2. maintain the trust accounts in categories of accounts fully insured by the appropriate US agency.

F. *Division of Carrier Funds*

1. the carrier shall first withhold from sums received from HCFA:

- a. a negotiated percent for administration;
 - b. sums sufficient to cover any catastrophic coverage or reinsurance premiums; and
 - c. sums required for purposes outlined under C.3 above.
2. the carrier will deposit all residual funds intended for individual beneficiaries in the individual trust account of each beneficiary in an amount not less than \$200 the first plan year and subsequently up to \$600 (deposits and withdrawals adjusted annually for changes in the Consumer Price Index) which may be reclaimed each year, as needed, to pay claims presented by the beneficiary;
 3. if the computed carrier reimbursement under C.2a varies from the actual sum due by more than 1%, the carrier at the end of the plan year shall either be reimbursed at a higher or lower rate for the succeeding year until the actual sums due are paid to or refunded by the carrier. These adjustments shall be made in 12 equal installments over a 12 month period commencing 30 days after final figures are released by the US Government.

G. Term

This plan shall be in effect for not less than five years from inception and will be extended annually automatically thereafter unless terminated by an Act of Congress.

H. Force and Effect of Legislation

For the purposes and duration of this experiment, other laws not withstanding:

1. no public release of data compiled by the Oklahoma Foundation for Peer Review shall be required, ever;
2. no actions may be brought by the US Department of Justice under the Sherman or Clayton Antitrust Acts or by the Federal Trade Commission under any otherwise permissive legislation against parties participating in this experiment;
3. ERISA is deemed inapplicable;
4. individual trust accounts shall not be subject to interest rate limits other than those specified above;
5. the Secretary of Health and Human Services and the General Accounting Office may audit the carrier, the Oklahoma Foundation for Peer Review, financial institutions holding trust accounts, and hospitals participating in this experiment, but shall

reimburse participating organizations and individuals for any costs incurred by such organizations and individuals by such audits;

6. any parties in conflict with a cause of action greater than \$5,000 shall have jurisdiction granted by the Federal Courts upon the request of either party;
7. any other benefits received by individuals under other health insurance policies shall be applied first to medical/hospital costs, and at least \$200 out-of-pocket expenditures for insured purposes must be expended before claims can be made under this program.
8. the Oklahoma Foundation for Peer Review will for this experiment be doing private review and will not be subject to regulations or requirements of the Office of Peer Review of HHS or successor agencies;
9. Medicare regulations and carrier letters are deemed advisory and individual items may be waived at the discretion of the coordinating advisory council;
10. benefits to be paid shall be coordinated with any and all private insurance held by an individual beneficiary.

PART II. Beneficiaries with Low Incomes And Emergency Medical Expenses

A. Target Group

Medicare beneficiaries not otherwise qualified for Medicaid, with gross household incomes of less than \$10,000 annually and having assets exclusively of a home and its contents of less than \$10,000.

B. Supplemental "Early" Claims Permissible

Medicare beneficiaries otherwise qualifying under Part I who meet the additional qualifications of II.A may file claims for incurred expenses which are less than the Part I deductible provided that:

1. the claim is at least \$50 in amount

C. Loss of Stay-Well Bonus

Each claim filed under this part shall reduce the amount of the stay-well bonus by \$50 plus the amount of the claim. If three such claims are filed, no stay-well bonus shall be paid.

D. Maximum Amount Claimed

No more than \$200 may be claimed under this part in any calendar year.

E. HCFA shall reimburse the carrier the full amount of any claim paid under this part without regard to amounts previously computed under Part I.

Part III. Medicaid Beneficiaries

A. *Target Group*

All individuals otherwise qualified to receive Title XIX funds for medical care.

B. *Financing Method*

1. HCFA and the appropriate state agency shall compute for Title XIX beneficiaries in Oklahoma;
 - a. the average per capita expenditure of HCFA funds per beneficiary under Title XIX including all costs external to Washington and regional HCFA offices.
2. HCFA will pay to the carrier selected under Part I in monthly installments in advance 1/12 of the amount computed under III.B.1. times the number of beneficiaries increased by the anticipated increase in the medical and hospital services component of the CPI for the plan year over that of the year of computation.
3. the Carrier will perform those duties outlined in I.C.3 and HCFA those duties of I.C.4.

C. *The Medicaid benefits will provide:*

1. That each beneficiary shall pay coinsurance in the amount of 10% of gross income up to a maximum of \$1,500 in each calendar year for medical expenses.
2. the Medicaid beneficiary is then eligible to receive payments for services rendered to him up to those maximum existing under the state plan in the plan year immediately preceding the establishment of this experiment increased by the amount that the hospital/medical services component of the CPI in a given year exceeds that of the year immediately preceding the establishment of this experiment.
3. if no claims are filed, the individual is eligible to receive a stay-well bonus of up to \$200 payable 105 days after the end of the plan year. If claims are filed:
 - a. and are less than 2 in number and less than \$100 in aggregate, the stay-well bonus shall be \$100;
 - b. are three or more in number or greater than \$100 in aggregate, no stay-well bonus shall be paid.

D. *Trust Accounts*

1. Trust accounts will be established for each

beneficiary in the same fashion as I.E.1, a and b, and I.E.2.

2. At termination of the trust, by virtue of lapse of eligibility of the covered individual, the carrier shall close the trust account and provide a check for the outstanding balance as specified under I.E.1.c.

E. *Division of Carrier Funds*

The carrier will divide funds as specified under I.F.

F. The effective term and force and effect of this legislation shall be the same as that of I.F. & G.

PART IV. Tax Deductions and Other Financing Changes for the Purchase of Health Insurance For/By Private Individuals

A. *Phase I (Accumulation of Funded Accounts)*

1. Each individual may deposit or have deposited by an employer with a certified carrier of medical and hospital insurance up to \$1,200 per annum increased each year by the increase in the hospital/medical component of the CPI for the purchase of "stay well" insurance, and such money shall be excluded from federal income tax until such time as the insurance program is "funded" as described below.
2. Carrier certification. Any company licensed to sell health insurance within a state shall be deemed to be certified by the Secretary of Health & Human Services if it shall have obtained approval from the state insurance commission to market a policy of "stay-well" insurance as defined below and has been endorsed by the organizations specified in I.C.2.
3. Stay Well Insurance
 - a. From the premium received from or for an individual, the carrier shall deposit at least \$200 the first year and in subsequent years at least one-half in a master trust account with individual sub-accounts in federally insured banks, credit unions or savings institutions which shall pay interest on such accounts at least monthly at an interest rate not less than the average rate on 90-day US Treasury Bills at the last auction of the preceding month. The bank, credit union, or savings institution shall perform those

services required under I.E.1.a.b. and I.E.2.

- b. the carrier will provide \$600 deductible medical and hospitalization insurance increased each year by the CPI medical services increase to include at least the benefits specified in IV.D.
 - c. if no claims are filed by an individual in a given 12 month plan year, the carrier shall withdraw from the trust fund a \$200 "stay well" bonus and mail same to insured.
 - d. if claims are filed, up to one-half of the individual trust fund shall be used to pay such claims.
 - e. after the first plan year (earned interest shall be credited toward the purchase or provision of catastrophic insurance coverage with a deductible equal to \$600 adjusted for the CPI plus one-half of the corpus held in the trust fund.
4. **Funded accounts.** Each individual account shall be deemed "funded" when one-half the interest income derived therefrom shall be sufficient to purchase catastrophic insurance with a \$600 deductible and a \$200 stay-well bonus (adjusted by the hospital component of the CPI) and the trust account has at least \$10,000 (adjusted) in its corpus.

B. Phase II-Funded Accounts

1. After an account is funded as defined on IV.A.4. one-half of the interest earned in any plan year shall be paid out to the insured individual as nontaxable income and one-half shall accumulate in the trust fund exempt from current taxation.
2. If claims should be made to a funded account which would reduce the account below levels required to maintain a funded status, additional contributions may be made up to \$1,200 per individual year as in IV.A. until the account is funded. Otherwise, no additional premiums may be paid into the account.

C. Termination of Insurance and Disposition of Funds

1. If an insured individual with "stay well" insurance and a trust fund dies and has not been enrolled in Medicare, one-half of the remaining trust account shall be paid to the

individual's estate, and one-half shall be paid to the US Treasury.

2. If an insured individual becomes otherwise eligible for Medicare and the account is fully funded, his insurance may be continued in lieu of Medicare. At death, the provisions of IV.C.1. apply.
3. If an insured individual becomes eligible for Medicare AND the account is or becomes less than fully funded, then:
 - a. the individual may elect to make additional contributions under IV.B.2. or
 - b. the fund may be rolled over to a participating Medicare fund under Part I.
4. If a rollover as defined under IV.C.3.b. occurs, one-half of the amount rolled over shall be paid to the individual's estate at the time of death, the remainder of the fund, if any, shall be paid to the Social Security Administration as specified under I.E.1.c.
5. If an individual over 21 years of age, less than 65 years of age, and having earned income elects to remain uninsured in a jurisdiction in which "stay well" insurance is offered, a 1% of gross income surcharge shall be levied and paid to the Medicare trust funds.
6. If an insured individual elects to drop his insurance:
 - a. the provisions of IV.C.5. apply and,
 - b. no interest shall be paid out from any trust fund, and,
 - c. if he subsequently becomes a Medicare enrollee, the trust fund shall be rolled over as in IV.C.3.b., and
 - d. if he dies without enrolling in Medicare, the trust fund shall be paid over to the Social Security Administration as in I.E.1.c.
7. If an individual described under IV.C.6. resumes insurance, he may do so at any time, in which case the other provisions of Part IV shall be followed, as applicable.
8. If any trust account established under this program is in the name of a beneficiary who cannot be located for a period of 14 years, any sums contained in the account shall be paid to the US Treasury.

D. Benefits

1. This policy will pay reasonable and customary charges for medically necessary services, supplies, and equipment authorized or provided by a duly licensed physician.

2. All inpatient hospital services meeting the required conditions described in the preceding paragraph are eligible for payment under this Policy. Payment for bed and board charges is limited to the reasonable and customary semi-private room rate as determined by the carrier.
3. Subject to the conditions expressed in the "Covered Expenses" section, the carrier will pay for the following services, supplies and equipment.
 - a. outpatient charges by a hospital, ambulatory surgical center, outpatient clinic or similar licensed institution.
 - b. charges for a physician's service wherever rendered.
 - c. charges made by a special care facility, except that charges for inpatient care of mental illness, functional nervous disorders, alcoholism, and drug dependency shall be limited to 45 days per year.
 - d. charges for services by a registered or licensed practical nurse.
 - e. charges for anesthesia and its administration.
 - f. laboratory and X-ray examinations.
 - g. such other charges as may be incurred by the insured for appropriate medical services, supplies, and equipment including, but not necessarily limited to the following: X-ray, radium, radioactive isotope treatment; blood and blood products not donated or replaced; oxygen and other gases and their administration; rental of an oxygen breather or other durable equipment; reasonable and appropriate physical therapy; prosthetic appliances; dressings, casts, and splints; drugs and medicines lawfully obtainable upon the written prescription of a physician; and charges for necessary ambulance service.
4. The carrier will treat charges associated with pregnancy and delivery in the same manner as charges resulting from illness or injury.
 - cept prostheses required as the result of surgery.
 3. charges for treatment of the teeth except that required as a result of trauma to normal healthy teeth while insured under this policy.
 4. charges for treatment or sickness or injury for which an Insured received treatment, diagnosis, or incurred expenses during the 90 days immediately preceding the effecting of coverage under this Policy, except that treatment for such conditions shall become eligible for benefits after the insured has been covered by this Policy for 12 consecutive months.
 5. charges for treatment or supplies which are provided or for which the insured is reimbursed by a public program; or services provided by virtue of the insured's past or present service in the armed forces of a government.
 6. charges for treatment eligible for coverage under any Workers' Compensation, Employer's Liability, occupational disease, or similar law.
 7. charges for custodial care, education, or training except therapeutic education deemed reasonable by the Carrier.
 8. charges which the insured is not expected or legally required to pay.
 9. charges which would not have been made had there been no insurance coverage.
 10. charges for services rendered by a Physician to his own family members.
 11. charges for services, supplies, and equipment of a hospital located outside of the United States, except where emergency medical treatment is necessary or where such services have received the prior approval of the Carrier.
 12. charges for services necessitated by war or an act of war.
 13. charges for services resulting from self-inflicted injury.

E. Exclusions

This policy will not pay for the following:

1. charges for cosmetic surgery not necessitated by a covered bodily injury or congenital anomaly in a child born to an insured while covered under this Policy.
2. charges for eyeglasses or hearing aids ex-

F. Deductibles and Coinsurance

1. Each insured individual must meet a deductible of \$200 each plan year before becoming eligible to receive benefits.
2. Each insured individual will pay 20% of medical and hospital expenses over \$200 and up to and including \$1,200 in any plan year. The balance will be paid by the policy.

HEALTHY INDIVIDUAL

Age	65	66	67	68	69	70	71	72	73	74	75	76
Carryover	—	431	952	1525	2155	2848	3610	4449	5372	6387	7503	8731
Deposit	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	—
(Administ.)	(84)	(84)	(84)	(84)	(84)	(84)	(84)	(84)	(84)	(84)	(84)	(84)
(Catastrophic)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)
Interest	15	105	157	214	277	346	423	507	599	700	812	815
(Claims)	—	—	—	—	—	—	—	—	—	—	—	—
(Rebate)	(200)	(200)	(200)	(200)	(200)	(200)	(200)	(200)	(200)	(200)	(200)	(200)
Net	431	952	1525	2155	2848	3610	4449	5372	6387	7503	8731	8762

After 75, maximum program costs = \$600 in any year with a claim

After 75, maximum program costs = \$0 in any year of no claims

At death, Treasury receives \$8762 (in constant dollars)

Net cost = \$5038 Less \$600 = \$8162

or \$252/year Claim in year of death

AVERAGE INDIVIDUAL

Age	65	66	67	68	69	70	71	72	73	74	75
Carryover	—	431	952	1125	1715	2364	3078	3463	4287	5193	6190
Deposit	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
(Administ.)	(84)	(84)	(84)	(84)	(84)	(84)	(84)	(84)	(84)	(84)	(84)
(Catastrophic)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)
(Premium)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)
Interest	15	105	157	174	233	298	369	408	490	581	681
(Claims)	—	—	(600)	—	—	—	(600)	—	—	—	(600)
(Rebate)	(200)	(200)	—	(200)	(200)	(200)	—	(200)	(200)	(200)	—
Net	431	952	1125	1715	2364	3078	3463	4287	5193	6190	6887

At death, Treasury receives \$6887 in constant dollars

Net cost for 11 years = \$6313 = \$573.91/year

PROJECTED SSA COSTS

	Years 1-11	Years 12-23	Years 24-25	Years 36-47	Years 48-59	Years 60-71	Years 72-83
Annual Outlay	\$1200	\$1200	\$1200	\$1200	\$1200	\$1200	\$1200
Interest on							
Recapture	0	(344)	(689)	(1033)	(1377)	(1722)	(2066)
Net Cost							
Each Year	\$1200	\$ 856	\$ 511	\$ 167	—	—	—
Savings Applicable					\$ 177.4	\$ 522	\$ 866
to Trust Funds							

Assumes:

- 1) All assumptions for individual "average" table
- 2) A beneficiary dies in 11 years and is replaced by a successor
- 3) Funds recaptured by the government are not spent but reinvested at a real 5% interest rate

SICK INDIVIDUAL

Age	65	66	67	68	69	70	71	72	73	74
Carryover	—	431	952	1525	2155	2848	3210	4009	4488	5414
Deposit	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
(Administ.)	(84)	(84)	(84)	(84)	(84)	(84)	(84)	(84)	(84)	(84)
(Catastrophic)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)
Interest	15	105	157	214	277	346	383	463	510	603
(Claims)	—	—	—	—	—	(600)	—	(600)	—	(600)
(Rebate)	(200)	(200)	(200)	(200)	(200)	—	(200)	—	(200)	—
Net	431	952	1525	2155	2848	3210	4009	4488	5414	6033

Individual has heart attacks at end of year attaining ages 70, 72, and 74, dying of the latter.

At death, Treasury receives \$6033 (in constant dollars)

Net cost = \$5967 = \$547/year

APPENDIX
ILLUSTRATIVE GAINS TO THE
MEDICARE TITLE XVIII TRUST FUNDS

Under the Oklahoma Experiment

Table of Assumptions

1. Deposits, administrative payments and catastrophic premiums are all paid on January 1.
2. Interest is paid annually on December 31 as are claims and rebates.
3. Deaths occur on December 31.
4. Interest earned is 5% (nominal interest less current apparent inflation premium).
5. All amounts are in constant dollars.
6. All amounts are estimates or illustrative figures and subject to revisions based upon actual and/or actuarial data, as appropriate.

Report of the
COUNCIL ON STATE LEGISLATION
(APPROVED)

SUBJECT: Annual Report
PRESENTED BY: The Council on State Legislation
REFERRED TO: Reference Committee III

INTRODUCTION:

The council has the charge of monitoring state legislation that has any impact on the practice of medicine. When necessary, it may develop legislative policy for consideration by the Board of Trustees and otherwise prepare and give testimony on specific legislative bills. The council's activities shall be governed by the Board of Trustees of the Oklahoma State Medical Association.

REVIEW OF ACTIVITIES:

The council met several times in the fall of 1981 prior to the legislative session to discuss anticipated legislative issues. During the legislative session the council met every two weeks on Tuesday evening at the Oklahoma State Medical Association headquarters. The council has reviewed some 23 pieces of legislation dealing with various issues. An updated list of legislation is attached to this report.

The council has had several discussions on

general topics such as the continued practice expansion of allied health practitioners, the current situation with malpractice and the effect of federal cutbacks on medical reimbursement programs. During the remainder of the year, the council will continue to study these subjects as well as a proposal from Tulsa on legislation to control indiscriminate establishment of multiphasic health screening clinics in Oklahoma.

The legislative council has introduced two resolutions before the 1982 House of Delegates. Resolution #9 is in response to the continued involvement by the state legislature in non-FDA approved drugs. The resolution would ask the Oklahoma State Medical Association to act as a collection center for information from its members of adverse reaction to non-approved drugs and treatment. Resolution #14 is an appeal to the various county medical societies to designate one of their regular meetings as a legislative awareness meeting by inviting their local House and the Senate legislators. This could be a purely social function or involve organized discussion of specific topics and question and answer sessions.

The work of the legislative council would be completely ineffective if it were not for the positive involvement and response by the members of the Oklahoma State Medical Association and Auxiliary. The council is most appreciative of the way the Oklahoma State Medical Association members respond to the legislative alerts and newsletters. The medical auxiliary is to be commended for their increased interest and effectiveness in legislative issues.

Respectfully submitted,
William L. Hughes, MD
Leonard H. Brown, MD
Joe C. Cole, MD
Hugh M. Conner, Jr., MD
Raymond L. Cornelison, Jr., MD
Robert A. Ellis, MD
William P. Jolly, MD
Perry A. Lambird, MD
Joan K. Leavitt, MD
John B. Nettles, MD
Clayton Rich, MD
Tim K. Smalley, MD
Joseph W. Stafford, MD
G. Rainey Williams, MD
Edgar W. Young, Jr., MD
George F. Short, Esq.
Mrs. J. A. Montero

STATUS OF SENATE BILLS

April 21, 1982

Bill #	Author	Subject	Status
• 3	Howell	Burn Registry	Died in Committee
• 6	Watson	DMSO	Approved by Gov. on 5/19/81
7	Boatner	Exempt Prescription Drugs	Died in Committee
• 12	Landis	Rape Emergency Treatment	Died in Committee
• 21	McCune	Marijuana Research	Died in Committee
• 96	F. Smith	Premarital Syphilis Exam	Died in Committee
• 129	F. Smith	Joint Tortfeasors Liability	Died in Committee
• 136	Watson	Comprehensive Health Education	Died in Committee
• 140	Howard	Workers Comp-Payments	Died in Committee
• 142	Howard	Workers Comp-Disability	Died in Committee
• 143	Howard	Workers Comp-Employer Liability	Died in Committee
• 218	Johnson	Wrongful Death	Died in Committee
• 219	Porter	Insurance-Abortion	Died in Committee
• 247	Watson	Merit System-Add RN's	Died in Committee
• 248	Watson	Nursing-Exams, etc.	Approved by Gov. on 6/30/81
278	Howell	Marital & Family Therapists	Died in Committee
• 296	Terrill	Emergency Medical Care (EMT)	Died in Conference
297	Terrill	Alcohol Treatment Programs	Died in Conference
299	Terrill	Insurance-Optional Alcohol Abuse	Died in Committee
• 300	Terrill	Insurance-Alcohol Abuse	Died in Committee
301	Terrill	Eligibility-Public Assistance	Died in Committee
334	Randle	911 Emergency Telephone System	Do Not Pass from Comm. on County Gov.
348	Combs	Insurance-Include Chiropractors	Died in Committee
• 380	J. Smith	"Agent Orange" Commission	Died in Committee
• 392	McCune	Expenses-Maintenance of Prisoners	Signed by Gov. 4/1/82
• 417	Shedrick	"Natural Death Act"	Died in Committee
• 477	O'Connor	English Language-Educators	Signed by Gov. 3/26/82
• 510	McDaniel	State Board of Health	Died in Committee
• 539	Clifton	Drug Paraphernalia	Returned to Senate for consideration of amendments
• 554	Terrill	Health Insurance Policies	Died in Committee
561	Howard	Appropriations to DOH	Died in Committee
565	Combs	Board of Chiropractic Examiners	Returned to Senate for consideration of amendments
• 572	Stipe	Temporary Nurse Licenses	Died in Committee
• 574	Stipe	Hearing Tests-Newborns	Signed by Gov. 4/9/82
575	Stipe	Unclassified Service	Died in Committee
• 576	Stipe	Foreign-Trained Doctors	Died in Committee
• 577	McCune	Physician Detachable Insignia	Passed to Governor
589	Miller	Podiatry Education Assistance	Died in Committee
595	Randle	Mental Health	Stricken from House Calendar-Dead
627	J. Smith	Def. of Rape to Include Spousal	Died in Committee
• 639	Cate	Substance Abuse (Treatment)	Died in Committee
• 644	Terrill	Public Health-Cert. of Need	Died in Committee
• 646	Lamb	Registration-Dangerous Substance	Signed by Gov. 4/6/82
SR 22	O'Connor	Transfer Credits of Students	Died in Committee
SCR 7	McCune	Delta-9-THC Program	Withdrawn from Calendar-Dead
SJR 12	Keating	Trauma Center	Died in Committee
SJR 37	Shedrick	ERA Amendment	Died in Committee

• Bills which OSMA is tracking.

STATUS OF HOUSE BILLS

April 21, 1982

Bill #	Author	Subject	Status
• 1024	Sanders	Chiropractic Scholarships	Signed by Gov. 4/8/81
• 1041	Vaughn	Marijuana Research	Died in Committee
• 1058	Denman	Optometry Bill	Signed by Gov. 4/6/81
1100	Deatherage	PMTA Appropriations	Signed by Gov. 5/25/81
1145	Henry	Legal Officer-SBI	Motion to reconsider-failed
1163	Deatherage	Anatomical Board Appropriation	Signed by Gov. 4/1/82
• 1172	Fair	Asexualization of Sex Offenders	Died in Committee
• 1178	Deatherage	Autopsy (Defining & Specifying)	Signed by Gov. on 4/24/81
• 1183	Riggs	Sexual Assault Exam Fund	Signed by Gov. on 5/8/81
1231	Deatherage	Foster Care Review Act	Signed by Gov. 6/29/81
1246	Draper	Athletic Trainers Act	Signed by Gov. 5/8/81

•	1257	Graves	Abortion—Funding	Died in Committee
•	1258	Graves	Abortion—Performance	Died in Committee
•	1300	F. Davis	Prescription Labels—Diagnosis	Died in Committee
•	1339	Denman	Emergency Medical Care (EMT)	Signed by Gov. 6/29/81
	1373	Brown	Alcohol Treatment & Rehabilitation	In Conference
	1386	Hamilton	Rape Victims—Crisis Centers	Died in Committee
	1410	Hooper	Medicare—Minimum Standards	Signed by Gov. 5/11/81
•	1428	Twidwell	Contributory Negligence	Died in Committee
•	1474	Hargrave	Prohibit Charge Parking—Hospital	Died in Committee
•	1492	Hargrave	"Agent Orange" Commission	Signed by Gov. 3/29/82
•	1612	Brown	Child Restraint Systems	In Conference
•	1616	Kincheloe	Remove Resistance—Rape Statutes	Died in Committee
•	1629	Brown	Executive Officers—Compensation	Stricken from House Calendar—Dead
•	1633	Twidwell	Immuno-Augmentative Therapy (IAT)	Signed by Gov. 3/2/82
	1638	Manar	PMTC (Sunset Review)	Passed—To Governor
	1639	Hastings	Drug Treatment & Rehabilitation	Returned to House for Consideration of amendments
	1640	Hastings	State Anatomical Board	Passed—To Governor
	1644	Trent	Board of Examiners — Speech & Audio	Signed by Gov. 3/30/82
•	1737	Deatherage	Remove & Donate Organs	Vetoed by Gov. 3/24/82
	1740	Trent	Filing of Regis.—Ethics	Died in Committee
•	1758	Atkinson	Third Party Prescription Act	Died in Committee
•	1771	Hastings	Defining Controlled Substances	Signed by Gov. 3/17/82
•	1779	Sherrer	Oklahoma Nursing Practice Act	Died in Committee
	1787	Hamilton	In-House Comm. Services Council	Died in Committee
•	1799	Gray	Info. for Breast Cancer Patients	Returned to Committee—Dead
•	1818	Fitzgibbon	Workers Compensation	Died in Committee
•	1819	Fitzgibbon	Definitions of Beneficiaries	Died in Committee
•	1821	Fitzgibbon	Insurance Policy Coverage	Signed by Gov. 3/30/82
	1829	Hamilton	In-Home Comm. Service Council	Died in Committee
•	1832	Hamilton	Criminal Procedures—Rape, etc.	Returned to House for consideration of amendments
•	1833	Hamilton	Crimes & Punishment — Rape	Died in Committee
•	1865	Denman	Emergency Medical Care	Returned to Committee—Dead
•	1867	Denman	Board of Chiropractic Examiners	Signed by Gov. 3/26/82
•	1885	Weichel	Trans. of OSBNDD to Div. of ABC Bd.	Died in Committee
	1889	F. Williams	Rights of Minors to Consent	Died in Committee
	1907	Henry	Monocopper (II) Citrate	Died in Committee
•	1909	Henry	Workers Comp. Board	Died in Committee
	1913	Duckett	Emergency Action for Mentally Ill	Died in Committee
•	1918	Riggs	Comm. on Deaf & Hearing Impaired	Died in Committee
•	1921	Riggs	Abortion—Performance	Died in Committee
•	1931	Vaughn	Handicapped-Equipped Transportation	Died in Committee
•	1935	Duckett	Offices of Mental Health	In Conference
•	1936	Duckett	Mental Health—Internal Auditors	Died in Committee
•	1939	P. Williams	CPR	Died in Committee
•	HCR 1014	Draper	Tulsa Medical School Resolution	Passed
	JHR 1001	Sparkman	Vendor Drug Program	Dead

• Bills that OSMA is tracking.

Report of the COUNCIL ON MEDICAL SERVICES (APPROVED)

SUBJECT: Annual Report

PRESENTED BY: John A. Blaschke, MD,
Chairman

REFERRED TO: Reference Committee III

INTRODUCTION:

The council has been charged with the duties of studying and making decisions and formulating activities with respect to the provisions of adequate medical care, including but

not limited to the design of evaluation of all types of health care delivery systems, health planning, the financing of medical services, and its impact on the quality of patient care, the social aspects of health, internal peer review mechanism, and the appraisal of all external programs which affect the cost and quality of medical care.

REVIEW OF ACTIVITIES:

A. Appropriateness Review Committee — The most time consuming function that the council is involved with is that of acting as the Appropriateness Review Committee (Peer Re-

view) of the association. The new guidelines for the committee allow for staff and smaller subcommittees, with the direction of the chairman, to handle many cases that are repetitious in nature. This is done primarily with the help of review consultants who review the case material and make recommendations. The entire council is available to and has handled those cases which are different and no precedent has been set.

We have found the system to work fairly well most of the time, but we are still working out some of the details and trying to strengthen the guidelines.

One helpful thing which has occurred is that the Oklahoma County Medical Society has reactivated their insurance review committee, and they will handle all cases in the Oklahoma County area. Especially noticeable has been the cooperation of society members when we have asked for fee information.

B. Health Planning — Last year we were contemplating what was going to happen to health planning, and we still don't know the end of the scenario; however, it is fairly certain that health planning as we have known it for the past four years will soon be eliminated. We will also still be faced with the question of what to replace the old system with. The council is in favor of some sort of locally funded and governed health planning and will certainly work within the system to provide leadership, knowledge and expertise.

C. Physician Placement — Physician placement is still a vital concern of this council. We are pleased to report that the placement program conducted by the Oklahoma Physician Manpower Training Commission on behalf of the OSMA is working well. Placement officers have been positioned on both the Oklahoma City and Tulsa campuses of the University of Oklahoma Medical School for close communication with OU graduates. The community match and loan scholarship programs are working very successfully in contracting with students to go into rural practice upon completion of their training. This entire program has received a tremendous boost because of the hiring of two outstanding gentlemen at the University of Oklahoma Health Sciences Center. Charles McCall, MD, has been hired as the Dean of the College of Medicine and Christopher Ramsey, MD, has been hired as the new

Director of the Family Practice Program of the College of Medicine. Both of these gentlemen are quite dedicated to the training of primary care physicians which is vitally important in placing physicians in rural areas of the state.

Over the past year, we have received several inquiries as to the exact duties of the Physician Manpower Training Commission and whether it is in OSMA's best interests to support it. An excellent summary has been provided for your review (Attachment I) and also it should be kept in mind that the origin of the PMTC began from a rural community loan program the OSMA had seven years ago.

D. Liaison With Other Health Care Organizations — It is still a primary concern of the Council on Medical Services to maintain relationships and communication with other health care providers. There has been much said about the nursing shortage and medicine's relationship with nursing, but the council has decided to continue to support last year's resolutions supporting nursing education at all levels with special emphasis on bedside nursing education and avoid controversial issues existing in the nursing profession at this time.

E. Single Statewide Medicare Reimbursement — During last year's meeting, the House of Delegates considered two resolutions concerning fee discrimination and finally adopted a substitute, which in essence instructed that the issue be studied and necessary actions taken to insure that Oklahoma patients are equitably reimbursed by third party payors for services rendered by physicians and that free market forces are not restricted in the medical marketplace.

This was followed up on by you. OSMA staff, who working with the Oklahoma Health Systems Agency presented material to the Department of Health and Human Services Office in Dallas, Texas asking for a study of the Oklahoma situation.

The study was completed by the feds (Executive Summary Attachment II) and it concluded that some physician and patient reimbursement would be raised, but some would also be lowered to reach a single reimbursement mechanism. The study also concluded it would cost Medicare approximately 2.2 million dollars in order to make the change.

The Oklahoma Health Systems Agency, who conducted their feasibility study, does not agree with the report and has requested the data the federal study was based upon in order

that they can check it against their own study. The feds have been stalling and will not release the data until September. By that time the HSA will probably be out of business and the issue (for them) closed.

It was this council's belief that pressure should still be placed on the Department of Health and Human Services to make Oklahoma a single state reimbursement area and proposes that Resolution 9 receive careful consideration.

F. Non-Medical Personnel Giving Medical Orders – Over the past year a situation has arisen, which involved a non-physician in a nursing home stopping a physician's medication orders to a patient, because the order was delinquent.

Upon requesting a response from the welfare department, we were informed that there is a federal regulation that prohibits administering medication unless current orders by an attending physician exist. Definition of the term "current orders" is not clear. There was considerable concern about this regulation, if in fact it exists, and efforts are being made to have a personal meeting with Mr Lloyd Rader, Director of the Oklahoma Department of Health and Human Services, to discuss this problem. Resolution 1 has been introduced concerning this issue, and if efforts to clarify and solve the problem do not occur, the council will consider a resolution of its own, as a late order of business for this House.

G. Sports Medicine Committee — The Council on Medical Services unanimously voted to request that the Sports Medicine Committee of the OSMA be reactivated. Because of the resurgence of sports activities at all ages in this country and due to some tragic events of recent weeks, it is felt that this would be timely and good for public relations. There are a number of dedicated and experienced personnel to draw from and even the Governor's office has a Sports Medicine Committee which we could use as a resource.

It was also felt by the council that this committee should be placed under the jurisdiction of the Council on Public and Mental Health. This, of course, would need to be worked out with Chester Bynum, MD, and his council.

RECOMMENDATIONS:

1. The Appropriateness Review Committee will continue its activities.
2. Health planning continue to be a priority for this council.

3. The council continue in its liaison with allied health professional organizations.

4. OSMA continue to support nursing education at all levels and support the increase in numbers of bedside nurses.

5. Continue support for the Physician Manpower Training Commission and its physician placement programs.

6. Support efforts to have Oklahoma designated as a single statewide Medicare reimbursement area.

7. Reactivate the Committee on Sports Medicine and consider it being placed under the jurisdiction of the Council on Public and Mental Health.

BUDGET REQUEST:

Council meeting expenses	\$1,000.00
Other council objectives	1,500.00
TOTAL	\$2,500.00

Respectfully submitted,
 John A. Blaschke, MD, Chairman
 Ronald S. Barlow, MD
 Donald C. Cooper, MD
 Maurice C. Gephardt, MD
 Roger V. Haglund, MD
 Ray V. McIntyre, MD
 F. David Kalbfleisch, MD
 Bartis M. Kent, MD
 James A. Merrill, MD
 Malcolm Mollison, MD
 Phillip W. Perryman, Jr., MD
 Jane Self, MD
 Ray E. Spence, MD
 Orange M. Welborn, MD
 Kenneth E. Whinery, MD

ATTACHMENT I

(A report summarizing the program and financial administration of the Physician Manpower Training Commission is available from the OSMA.)

ATTACHMENT II
 OKLAHOMA ONE-LOCALITY STUDY
 REGION VI
 HEALTH CARE
 FINANCING ADMINISTRATION
 DEPARTMENT OF HEALTH
 AND HUMAN SERVICES
 DECEMBER, 1981

EXECUTIVE SUMMARY

The Health Care Financing Administration (HCFA) Regional Office conducted a study in Oklahoma to determine what effect a conversion from the current five pricing localities to a single statewide locality would have on Medicare reimbursement. The impetus for the study was a charge by Oklahoma Health Systems Agency that Medicare discriminates against beneficiaries who live in rural areas. During July, 1980, the HSA conducted a series of public meetings on this issue. This led to the Regional Office of the HCFA calling a meeting with the various people involved to discuss the issue and the options available. As a result of the meeting, HCFA agreed to conduct a study to determine the effects of a change to a statewide locality.

Throughout the Oklahoma Health Systems Agency (HSA) efforts to force a change to a statewide schedule in Oklahoma, Medicare carriers and HCFA staff have made several efforts to explain the adverse effects of the proposed change. We have pointed out that, quite simply, the Economic Index (EI) law, which limits current prevailing charges to FY 1973 levels plus the economic index, will not permit the across-the-board increases being sought. We have also explained that, on the contrary, many current prevailing charges would be reduced if the change were to occur. This report illustrates these points.

The HSA has placed a great deal of emphasis on the fact that "rural" charging practices are now equal to or rapidly approaching urban charges. Stated differently, since 1973, physicians in rural areas have increased their charges by a greater percentage than physicians in highly concentrated urban areas. Obviously, the limiting effect of EI prevailings (FY 1973 levels plus 79%) in these situations will be greater. The EI percentage which is released each year is based upon national data. Like any aggregate index, its limiting effect will vary depending upon inflation and other economic conditions in each state or any other geographic area. Such is the case among the current five localities in Oklahoma. The effects of these varying limits, however, cannot be circumvented through a locality charge.

The current locality structure is generally based upon the charging practices in 1973. If

current charging practices were the same throughout the state, which we did not find to be true, and a statewide locality was implemented, the EI would *still* have to be applied to the 1973 data, based upon an identical statewide structure. As this report demonstrates, a statewide prevailing in 1973 would be much lower than the 1973 Tulsa and Oklahoma City prevailings.

Thus, the current EI limited prevailings in these areas would be significantly reduced. This would create a gross injustice for the beneficiaries and physicians living in these areas, for they would be limited to less than the 79 percent increase permitted.

Program payments must be considered when any significant change in reimbursement methodology is proposed. The intent is to assure that the changes will neither adversely affect large segments of the beneficiary and physician population nor contribute to inflationary trends. As reflected in the data, although the net potential change in total dollars represents an increase, there are considerable decreases in payout in the Tulsa and Oklahoma City areas. Some decreases were also noted in the other localities.

As reflected, localities are established primarily to follow different charging patterns. To the extent that there are different charges, localities cannot be manipulated or designed to arbitrarily increase reimbursement. When any locality change is recommended and approved, it must be put in place "as is" supportable by the charging practices, without special compensation for those who may be disadvantaged.

Hopefully this report demonstrates the adverse effects of converting Oklahoma to a statewide locality as proposed by the HSA. Previous experience in similar situations permitted us to previously advise the HSA of the potentially adverse effects. It is unfortunate that the allegations were made through numerous newspaper articles and public hearings that "neither the Federal Health Care Financing Administration nor Aetna Life and Casualty Company, want to seriously address the problems." without factually presenting all of the disadvantages along with the advantages.

Obviously, we refute these allegations and do not support the proposed change to a statewide locality.

With respect to the specifics of the study, the study team selected 90 prevailing fees for vari-

ous specialties and compared the fees for the procedures in the five localities to the statewide fees. In addition, the team also looked at the customary fees of a selected number of physicians and compared these to the statewide prevailing fees. Charging practices were also reviewed.

Overall, in comparing the charging practice for all specialty groups, the team noted that the range of unadjusted charges showed either Area 1 or Area 2 (the urban areas) on the high end of the range. Of 32 comparisons, Areas 1 or 2 were at the high end of the scale 21 times (65 percent). Also, the team compared charging practices for general practitioners and internists in Areas 1 and 99. Differences in charging patterns existed for both specialties, but the gap is more significant between internists.

Based on the procedures reviewed which were assumed to be representative of the data base, the team found if a statewide locality was implemented, the prevailing fees would increase in 34.4 percent of the cases and decrease in 16.9 percent. No change would be recorded in 31.3 percent of the fees for the services. The majority of the decreases (68.4 percent) would occur in Localities 1 and 2, which are considered the urban areas. Most of the increases would be in Locality 3 (29.7 percent) followed by Localities 4 and 99 (22.6 percent each).

Overall, assuming frequencies of services to be similar to 1980 frequencies, the net Medicare allowable charges would increase by a maximum of \$2.2 million which reflects an overall net increase of 4.8 percent when compared to current allowable charges for the study data. The calculation was based on comparisons only at the prevailing charge level, ie, customary charge reductions are not included. Of course, beneficiaries would still be responsible for 20 percent of this as well as any unmet deductible. The \$2.2 million figure is based on increases which would total \$3.7 million minus decreases of \$1.5 million. Significantly, over \$1 million of the increases would be in ambulance payments to localities outside of Area 1.

In looking at the impact of a statewide fee on four common specialty groups for common procedures, the review team found that the prevailing fees increased 60 times, decreased 39 times, and did not change 85 times.

For these four specialty groups, the Medicare allowable total dollars would increase overall by 1.4 percent for general practice, 8.7 percent

for general surgery, 5.0 percent for family practice and 1.1 percent for internal medicine. However, the team noted that for all 4 specialty groups, the total allowable in Area 2 would decrease.

Report of the COUNCIL ON MEMBERS SERVICES (APPROVED)

INTRODUCTION:

The Council is responsible for monitoring and developing programs that offer direct benefits to physicians as a result of membership in the Oklahoma State Medical Association. These include a variety of sponsored insurance programs — including the successful professional liability coverage through PLICO, PLICO's new health insurance, group life, disability income, office overhead and others. In addition, the Council is available to assist County Medical Societies, the OSMA Auxiliary and Resident and Medical Student Organizations.

REVIEW OF ACTIVITIES:

TOURS: The OSMA currently has five sponsored tours being promoted through the Members Services Council. Utilizing the services of The INTRAV Company, there are tours scheduled to the Nile River, Rhine River, Scandinavian Countries, and the Alpines. An April tour to Paris was promoted through Alumni Travel Company.

All of the promotional cost for the sponsored tours is paid by the tour companies.

SELECTED LAWS: During the past year, the Council, in cooperation with PLICO, published a special book of Oklahoma statutes directly affecting the practice of medicine. Known as *Selected Oklahoma Medical Statutes*, the booklet is made available to any OSMA Member or PLICO insured free of charge upon request. It is also being automatically sent to all new members of the Association. Approximately 2,000 copies have been distributed.

The book is also available for sale at a cost of \$10 per copy to non-members and to other interested persons. Approximately 100 copies have been sold.

Availability of the booklet was made known through PLICO News to all OSMA members

and via a special mailing to Oklahoma Hospitals and Physicians in surrounding states living in counties contiguous to Oklahoma.

EMPLOYEE SEMINARS: A series of seminars for new medical office employees is being sponsored by the Council in 1982. The purpose of the seminars is to familiarize new medical office employees with the legal and ethical aspects of the doctor-patient relationship and to give them some background information on medical education, medical ethics, physician-hospital relationship, financing medical care and working with patients.

The first seminar was offered in Oklahoma City at Lincoln Plaza Hotel on Saturday, March 27 and was attended by nearly 50 medical assistants. Additional medical seminars are scheduled for June 26 and September 25 in Oklahoma City and May 22 and September 11 in Tulsa.

Anita Delaporte, Lyle Kelsey and Ed Kelsay of the OSMA staff serve as instructors for the seminars.

A charge of \$25 per person is being made to offset the cost of the seminars and to pay for the educational materials that are being distributed.

CASSETTE TAPE: A special 60 minute cassette tape on malpractice prevention has been prepared by Ed Kelsay, OSMA Legal Counsel for distribution to OSMA members and PLICO insureds upon request. As of the writing of this report, nearly 700 cassettes have been given out.

The cassette program is broken down to two 30-minute presentations. Side one contains a general presentation on malpractice prevention for physicians, while side two is an in-depth discussion of informed consent.

POSTERS: A series of four malpractice prevention posters has been prepared for distribution to physicians' offices and hospitals. Three of the posters are designed specifically for hospitals, while the fourth can be utilized by either a hospital or a doctor's office.

The posters are being sent to all doctors and hospitals as they are printed. (The doctor's office poster will be distributed in mid-summer.)

UNDERWRITING COMMITTEE: The Council on Members Services also serves as the Underwriting Committee for PLICO. During the past year, it has met and considered several underwriting problems for the company.

If an application for PLICO insurance contains any untoward information (ie, previous malpractice lawsuits, loss of hospital privileges, loss or suspension of licensure, etc.) it is referred to the committee for consideration prior to the coverage being written.

The Council as a whole serves as the Underwriting Committee.

LOSS PREVENTION: The OSMA has a contract with PLICO to conduct loss or malpractice prevention educational programs throughout the state. Ed Kelsay, Staff Legal Counsel, has conducted over 200 such sessions since PLICO became operational in 1980. He has spoken to Hospital medical staffs, and County Medical Societies and personally addressed nearly 3,000 medical doctors in the state. In addition, he has arranged for special guest speakers to appear before the Oklahoma and Tulsa County Medical Societies and eight specialty organizations.

The Council also publishes the *PLICO News* quarterly in order to keep physicians up to date on professional liability activities.

Over 6,000 copies of the booklet *Professional Liability Medical-Legal Guide for Physicians* have now been distributed to Oklahoma doctors.

Other malpractice prevention activities (cited above) include publication of the Oklahoma Statutes Booklet, malpractice prevention cassette program and the poster program.

PHYSICIANS COMMITTEE: This special committee continues to be available for consultation with members of the Association who have personal problems that require discreet professional advice. The committee was established in the Bylaws of the Association approximately six years ago. Any physician member of the Association may request assistance from the committee or the committee may receive recommendations from other Association Committees, Councils, physician members or component societies, and may offer to counsel with a physician member. All counseling sessions are to be considered privileged and no written records or minutes are taken.

In its formative years, the Committee has taken a very cautious course in order to build up its credibility. Recently the Association's Planning and Development Council recommended that the Committee consider developing a more formal protocol for the handling of problem cases. The protocol would allow the Association to more closely monitor Committee

activities. In the past on several occasions, the Committee was actually working with the physician but this was not known to the Association's leadership.

PLICO: PLICO, the Physicians Liability Insurance Company, reports separately to the OSMA House of Delegates.

PLICO HEALTH: The Report regarding this insurance activity of the Association will be included with the PLICO Report.

DISABILITY INCOME PROGRAM: This program for OSMA members is written through the Continental Insurance Company and currently covers 460 physicians. Since the program began it has paid out nearly \$200,000.00 to physicians in order to assist them in offsetting their income loss.

HOSPITAL INDEMNITY PROGRAM: Also written by the Continental Insurance Company, this program is utilized by 204 OSMA physician members and has paid out nearly \$10,000.00 in benefits since the program's inception.

ACCIDENTAL DEATH AND DISMEMBERMENT PROGRAM: 314 OSMA members participate in this insurance program at the present time.

BUSINESS OVERHEAD EXPENSE PROGRAM: Along with the disability income program, the business overhead expense insurance program assures a disabled physician that he will be able to keep his office open, pay his employee salaries, and other overhead expenses, long enough either for his recovery or to handle all of the outstanding business affairs until such time as the office can be formally closed.

Respectfully submitted,
Earl M. Bricker, Jr., MD, Chairman
William G. Bernhardt, MD
David R. Brown, MD
Jared L. Bryngelson, MD
Ralph L. Buller, MD
William O. Coleman, MD
E. Ed Fair, MD
Thomas C. Glasscock, MD
Joe Ray Hamill, MD
Joe S. Hester, MD
George H. Jennings, MD
James S. Jones, MD
Richard A. McKinne, MD
Robert A. McLaughlin, MD
Jack P. Myers, MD
Paul O. Shackelford, MD
C. E. Woodard, MD

Report of the
AD HOC COMMITTEE ON
MEDICAL MALPRACTICE
(APPROVED)

SUBJECT: Annual Report
PRESENTED BY: R. Barton Carl, MD,
Chairman
REFERRED TO: Reference Committee III

INTRODUCTION:

At the request of the Council on State Legislation, the President of the Association appointed a multi-disciplined committee to review Oklahoma Statutes that affect the defense of medical malpractice cases. The Association has taken such action over the years with basic objective being statutory reforms that will enhance the ability of our lawyers to defend or win plaintiff actions brought against doctors. A similar review led to the introduction and successful passage of S. 628 in 1976 which resulted in significant changes in the Oklahoma law.

This year representation on the committee has been broadened to include, hospital representatives, osteopathic physicians, dentists, independent businessmen, in addition to OSMA representatives and lawyers.

ACTIVITIES:

The committee has held one meeting and reviewed the malpractice situation in Oklahoma. Board of Medical Examiner Reports indicate that the rate of incident reports (claims) is up and while the win/loss ratio in jury trials has not changed significantly, the awards, as well as settlements, show increasing amounts.

The committee discussed numerous legislation proposals, some of which have been enacted in other states. We attempted to measure the impact that the passage of such laws might have in Oklahoma, both in premium for insurance and on defense strategy. We also discussed specific malpractice cases that were examples of unreasonable awards, abuses of the legal process and other inequities in the system.

After considerable discussion, it was decided to take a two-level approach:

1. Amendments to the Statutes that have a reasonable chance for passage, and
2. A general education campaign that emphasizes the extra cost to the public of medical

care because of the high cost of insurance coverage and the necessity to practice defensive medicine.

The following legislative attempts will be made assuming there is sufficient support in the legislature and research indicates they are beneficial:

1. Elimination of the Ad Damnum
2. Attorney Fee Regulation
3. Awarding Costs to the Prevailing Party
4. Admission in Evidence of Collateral Sources
5. Notice of Intent to Sue.

SUMMARY AND CONCLUSION:

This is an informational report for the House of Delegates. Periodic reports from the committee will be provided to Officers and Trustees of the Association.

Respectfully submitted,
R. Barton Carl, MD, Chairman

Report of the OKLAHOMA MEDICAL POLITICAL ACTION COMMITTEE

SUBJECT: Annual Report
PRESENTED BY: William M. Leebron, MD,
Chairman
REFERRED TO: Reference Committee III

INTRODUCTION:

The Oklahoma Medical Political Action Committee is a bipartisan non-profit organization comprised mainly of physician members that seek to help elect political candidates that are open and responsive to the issues of medicine and related fields.

REVIEW OF ACTIVITIES:

During the off election year, OMPAC is primarily involved in evaluating the results from the previous election year as well as trying to increase membership in preparation for the next election. In the election year, OMPAC steps up its membership drive and solicits information about the elections, incumbents, and challenging hopefuls.

The OMPAC board met on March 6, 1982, to begin its activities for the '82 elections. The board will meet during this annual meeting and several times during the year around the filing period, primary and general elections.

The membership in OMPAC has never seen its full potential when compared with the strong 3,900 OSMA members. OMPAC is approximately 13% of the OSMA membership. Even though the number of members is low, OMPAC has always been successful in supporting winning candidates. More members would increase the impact of that success.

The 35 physician members on the OMPAC board work hard at trying to be responsive to the political atmosphere and the input from the OMPAC members.

Respectfully submitted,

William M. Leebron, MD, Chairman
C. S. Lewis, Jr., MD
Floyd F. Miller, MD
John T. Forsythe, MD
Lee E. Schoeffler, MD
George H. Kamp, MD
David A. Fell, MD
Michael J. Haugh, MD
Elvin M. Amen, MD
Hillard E. Denyer, MD
Norman A. Cotner, MD
Orange M. Welborn, MD
George M. Brown, Jr., MD
Larry W. Cartmell, MD
Richard J. Boatsman, MD
Jodie L. Edge, MD
William G. Bernhardt, MD
Neil W. Woodward, MD
Daniel R. Stough, MD
Jack W. Parrish, MD
H. Clark Hyde, Jr., MD
Edwin E. Rice, MD
James B. Pitts, MD
John R. Stacy, MD
Larry Long, MD
Curtis O. Bohlman, MD
John A. McIntyre, MD
James R. Rhymer, MD
Ed L. Calhoon, MD
Joseph W. Stafford, MD
Ellis Oster, MD
Mrs. Gary Strebel
Mrs. Glo Henley
Mrs. Jodie Edge
Mrs. J. R. Stacy

RESOLUTION: 1
(REJECTED)

INTRODUCED BY: Kingfisher County Medical Society
SUBJECT: Medical Orders given by Non-Medical Personnel
REFERRED TO: Reference Committee III

WHEREAS, county welfare workers without medical training sometimes order nursing home personnel to stop the medication orders of licensed physicians; and

WHEREAS, a significant but unknown number of Oklahoma nursing home patients have been injured and suffered relapses from this unethical and illogical practice; therefore be it

Resolved, that the Oklahoma State Medical Association officially approach the Director of Human Services of the State of Oklahoma to request that the practice be stopped, and be it further

Resolved, that the Oklahoma State Medical Association contact the Oklahoma Congressional Delegation and the Secretary of Health, Education and Welfare and petition for the repeal or rescission of the Federal Regulation that enables this abominable life-threatening practice to occur.

SUBSTITUTE RESOLUTION FOR
RESOLUTION: 1
(APPROVED)

INTRODUCED BY: Reference Committee III
SUBJECT: Medical Orders by Non-Medical Personnel
REFERRED TO: Reference Committee III

Resolved, that the Oklahoma State Medical Association initiate a cooperative study committee with the Oklahoma State Nursing Home Association, the Department of Human Services, and the Oklahoma State Department of Health, to educate non-medical personnel as to the laws and regulations governing the ordering and distribution of medication in long-term care facilities in Oklahoma.

RESOLUTION: 2

(Referred to PLICO Board for disposition recognizing that this problem is under study.)

INTRODUCED BY: Mark A. Kelley, MD
SUBJECT: Non-Discriminatory Health Care Reimbursement
REFERRED TO: Reference Committee III

WHEREAS, Oklahoma State Medical Association has taken an official position as recently as 1981 to support Psychiatrists, doing this publicly by going on record to encourage recruitment of Psychiatrists in Oklahoma, with this implying avoiding doing anything to discourage such recruitment and/or medical students from entering the specialty of Psychiatry, and

WHEREAS, Oklahoma State Medical Association is supporting programs for impaired physicians with this implying its willingness to avoid discouraging care of the impaired physician, and

WHEREAS, Oklahoma State Medical Association, as part of Physician Effectiveness Program, has established a loan fund available to offer the impaired physician financial resources for a comprehensive program of rehabilitative care, and

WHEREAS, It is completely unfair to single out a specialty of medicine to not compensate the type of care provided by that type of specialty, and

WHEREAS, historically the insurance industry has cited four major reasons for not providing equitable, fair and reasonable coverage of psychiatric care which have now been proved to be false or at minimum all data indicating these assumptions made at development of health insurance are currently not valid and may never have been valid; (These four major reasons are: 1) Costs of psychiatric care are uncontrollable and unpredictable; 2) The care of mental illness is not cost-effective; 3) Treatment for psychiatric illness is not efficacious; 4) Purchasers of health plans are not demanding of psychiatric care.); therefore be it

Resolved, that the Oklahoma State Medical Association strongly support a position of non-discriminatory health care reimbursement for all specialties of medicine and be it further

Resolved, that the Oklahoma State Medical Association present to Physicians Liability Insurance Company (PLICO) recommendations that the specific restrictions regarding psychiatric care in its new PLICO HEALTH program be dropped.

SUPPLEMENT TO RESOLUTION: 2

The four major reasons the health insurance business has presented for usually not providing other than none or markedly limited coverage as compared to other specialties of medicine are as follows:

(1) The first is that care costs by psychiatrists are uncontrollable and unpredictable. Part of this being based on the supposition that psychiatrists cannot agree among themselves on diagnosis or the optimal treatment plan. The data coming from research in Peer Review efforts indicates that this is simply not true. One of the best examples of this is a study by Sharfstein of data from Blue Cross, Blue Shield Federal Employees Plan in which there was stabilization of mental health provision at 7.5% of the total health care benefits with there being opportunity for much higher mental health utilization and it simply just was not taken. Another study by Krizay of Federal Government health plans produced essentially the same results and this study covered from 1973 to 1978 and included approximately 2/3 of 10,000,000 of the Federal employees.

(2) The second argument for not covering mental illness is that it is not cost effective. Again this has proved simply not to be true anymore than it is for any other type of illness plus it is reasonable to remind ourselves that the very purpose of insurance is to share risk of high expense among a large insured population regardless of whether it is an expensive mental illness or some other sort of illness or something else out of the health field. Every specialty of medicine has chronic permanent incurable conditions to deal with as well as limited illnesses. Some specialties have more than others. Research does show that people with mental illness are able to with care provided have development of better functioning and return to capable wage earning efforts to be productive members in their family and society and to have a sense of well being from their own accomplishments with also evidence that without the intervention of the illness with the psychiatric care that such recovery would not take place. It appears that part of the problem is in the area of what insurance people have called the "moral hazard" and that is something that is defined as "any characteristic of an insured person that tends to increase the likelihood and/or the severity of the

situation for which the person was insured." There are at times patients that are aware of the secondary benefit or gain that comes from being ill, having additional attention, money compensation, or whatever it is. This is true for all illnesses not just those that are for direct mental health care even though that is a mental health problem for all medical specialties. Specifically for mental illness, there unfortunately in my opinion is still considerable stigma about receiving mental health care and privacy is important to most people getting mental health care. With this being the situation, if anything I think wanting to avoid being labeled mentally ill would be more of a deterrent to seeking mental health care when indicated than to try to obtain it when it was, in essence, not needed and there is data that supports this position from various researchers. One such data is from physicians themselves that with the impaired physician program that the OSMA and County Medical Societies in Oklahoma, as well as in other states, there is reluctance of a physician that is impaired for whatever reason, frequently alcohol or drugs have been focused on, to get care when needed. An article in *Clinical Psychiatric News* dated February, 1982, is titled "Most Impaired MDs Need Outside Push to Receive Help". With this sort of data to assume that there is going to be over-utilization that is in essence utilization that is not needed by physicians, I think is very unlikely to happen as the data indicates that physicians tend to do the opposite.

(3) The third argument that insurance companies give for not providing reasonable coverage for psychiatric illness is that the treatment for the psychiatric illness is not efficacious. Again this assumption in the past is simply not true by the tremendous amount of growing data that demonstrates that psychiatrist intervention efforts regarding mental illness are of benefit with also there being considerable data showing that provision of psychiatric care actually has reduced the cost of general medical care. This is revealing of the fact that a person is a whole being and the arbitrary artificial division between mental and physical is an artificial division. One bodily function is the mental functioning that originates from the brain. There are many psychogenic related physical complaints that have had extensive medical workups and at times have included surgery, that is well known to all of us. Various studies indicate that 50 to 70% of all people

seeking a physician have a major component that is a psychogenic component of their condition. One such study as reported in the *Journal of Medical Care*, December 1979, review showed treatment of alcoholism, drug abuse, and mental illness reduced the subsequent general medical need for attention. This ranged, from various studies they reviewed, from 5 to 85% reduction in general medical care with the median reduction being 20%. This data came mainly from outpatient health maintenance organizations.

(4) The fourth argument presented by insurance companies for not providing mental health care coverage is because that is not demanded by purchasers of health plans. In our own situation, we are the purchasers and we can demand the coverages. As a psychiatrist and author of this resolution, I am able to state that I see a number of physicians and/or a member of a physician's family. My impression is that due to the stigma that can be and often is associated with psychiatric care, that members of our organization getting psychiatric care are likely to be reluctant to fight for the coverage due to that stigma. This has been a perpetual problem for those needing care in this area. I compare it to kicking a person when he is already down. I think as a group that for us to support each other and not, in essence, to kick a member that is down and to fully support that impaired physician for whatever reason or a member of his family is something that we should and can demand. There are other sources for mental health services than from a psychiatrist. I believe this is an important but separate issue. If such service is indicated, I believe if it is prescribed by a psychiatrist then the charge for this prescribed care should be covered.

RESOLUTION: 3
(APPROVED)

INTRODUCED BY: Cleveland-McClain
County Medical Society
SUBJECT: Assignment of Insurance Benefits
REFERRED TO: Reference Committee III

WHEREAS, it has been called to the attention of the Cleveland-McClain County Medical Society that the State Insurance Commission

apparently no longer requires insurance companies to honor the Assignment of Benefits, and

WHEREAS, this practice has caused some inconvenience to the physicians and a great deal of inconvenience to patients because physicians will no longer accept insurance for certain types of care because of this policy; therefore be it

Resolved, that the Cleveland-McClain County Medical Society requests a statement from the State Insurance Commissioner regarding the requirement for insurance companies to honor Assignment of Benefits, stating his policy in those cases when the insurance company does not honor Assignment of Benefits.

RESOLUTION: 4
(APPROVED)

INTRODUCED BY: OSMA Board of Trustees
SUBJECT: Salute to the OSMA Auxiliary
REFERRED TO: Reference Committee I

WHEREAS, the first medical auxiliary in the United States was founded 75 years ago in Shawnee, Oklahoma, and

WHEREAS, the support received by physicians from auxiliary members at all levels of the federation is genuinely appreciated and heartfelt; therefore be it

Resolved that the Oklahoma State Medical Association salute the diamond jubilee of the Oklahoma State Medical Association Auxiliary, the nation's first.

RESOLUTION: 5
(REJECTED)

INTRODUCED BY: Tulsa County Medical
Society
SUBJECT: Private Peer Review
REFERRED TO: Reference Committee II

WHEREAS, The House of Delegates of the American Medical Association has urged constituent state and county medical societies to establish Business/Medicine Coalitions for the purpose of effectively containing the cost of health care, and

WHEREAS, Tulsa County Medical Society, in cooperation with 19 industrial and business firms, has established the Tulsa Business/Medicine Coalition, with the Society sharing policy-making decisions with the business representatives on an equal 50-50 basis, and

WHEREAS, The initial development of a comprehensive program of health cost containment by the Tulsa Business/Medicine Coalition has indicated that objective health care cost containment may be expected through its implementation, and

WHEREAS, Efficient Utilization Review is an essential function in this cost containment program, and

WHEREAS, The Oklahoma Foundation for Peer Review has reliable data collected in the course of its operation, as well as a competent and experienced staff to administer a program of Utilization Review on a private basis, and

WHEREAS, Utilization Review conducted by the Foundation under the direction of its Board of Directors, the members of which are physicians and members of the Oklahoma State Medical Association, privacy of individual patient records may be assured, the interests of providers given paramount consideration, and responsible medical advisory services made available, and

WHEREAS, the cost of the program of private Utilization Review would be paid by the business interests of the Tulsa Business/Medicine Coalition; therefore be it

Resolved, that the Board of Trustees of the Oklahoma State Medical Association express its support of the concept of the Oklahoma Foundation for Peer Review providing Utilization Review on a private basis for Business/Medicine Coalitions developed by component county medical societies; and be it further

Resolved, that the Board of Trustees recommend to the House of Delegates of the Oklahoma State Medical Association that it consider this proposed policy; and be it further

Resolved, that the House of Delegates of the Oklahoma State Medical Association recommend to the Board of Directors of the Oklahoma Foundation for Peer Review that it authorize the participation of the Foundation in a program of Utilization Review for the Tulsa Business/Medicine Coalition, subject to negotiation of an acceptable contract or ag-

reement for the performance of such services on a private basis.

RESOLUTION: 6
(APPROVED AS AMENDED)

INTRODUCED BY: Oklahoma County Medical Society

SUBJECT: Student Loan Fund

REFERRED TO: Reference Committee I

WHEREAS, the curtailment of the student loan program is advocated by the Reagan Administration; and

WHEREAS, the guaranteed Student Loan Program was used by more than 40,000 medical students last year; and

WHEREAS, the cost of tuition and medical education is ever increasing; and

WHEREAS, the House of Delegates has a historical record of providing aid to medical students, approving resolutions in 1956 and 1971 creating student aid programs; and

WHEREAS, these programs have been dormant for the past five years because of the abundance of federal and state programs; and

WHEREAS, many qualified students may decide not to go to medical school because of the high cost, and the inability to secure loans; therefore be it

Resolved, that the House of Delegates hereby authorize and encourage a \$25.00 annual voluntary contribution to the OSMA Student Loan Fund to be administered and allocated as determined by the Board of Trustees.

RESOLUTION: 7
(APPROVED)

INTRODUCED BY: OSMA Council on State Legislation

SUBJECT: OSMA Voluntary Repository for Adverse Reaction to Legislated Drugs and Treatment

REFERRED TO: Reference Committee III

WHEREAS, the practice of medicine utilizes the scientific research and study of each accepted drug therapy and treatment; and

WHEREAS, the Oklahoma State Medical Association recognizes and supports the need for a regulatory agency such as the Federal Drug Administration to control the safety and efficacy of all drugs in the United States; and

WHEREAS, the Oklahoma legislature has introduced legislation to legalize substances

not approved by the Federal Drug Administration; and

WHEREAS, the legislature has passed this type of legislation against the advice of medical doctors and the OSMA; and

WHEREAS, this appears to be a trend within the Oklahoma legislature; therefore, be it

Resolved, that the Oklahoma State Medical Association develop a voluntary repository for information on adverse reactions to legislated drugs, *ie* laetrile, DMSO, Immuno-Augmentative Therapy.

RESOLUTION: 8
(*REJECTED*)

INTRODUCED BY: Edward K. Norfleet, MD,
Tulsa

SUBJECT: Test Tube Baby Centers

REFERRED TO: Reference Committee I

WHEREAS, it has been noted that there will be a Test Tube Baby Center in Oklahoma, and

WHEREAS, Oklahoma is in the Bible Belt and is obviously not ready for this human engineering marvel, and

WHEREAS, the Oklahoma State Medical Association will be much involved in this process by the possible insuring of the various physicians in the Association's totally owned malpractice insurance company and by the insurance of the zygote to grave philosophy in the Association's new health care plan, and

WHEREAS, the test tube baby production has brought forth many ethical, moral, and religious questions that have not been answered, and

WHEREAS, this entire concept is hardly out of the experimental stage; therefore be it

Resolved, that the Oklahoma State Medical Association immediately appoint a committee to resolve the ethical, moral and religious aspects of this plan, and be it further

Resolved, that the Oklahoma State Medical Association direct the PLICO Board to proceed with caution in underwriting such centers (Test Tube Baby Centers) in regard both to malpractice insurance and health care insurance as well.

RESOLUTION: 9
(*APPROVED*)

INTRODUCED BY: Council on Medical Services

SUBJECT: Appropriate and Equitable
Medicare/Medicaid Reimbursement
REFERRED TO: Reference Committee III

WHEREAS, an appropriate and equitable reimbursement mechanism for urban and rural primary care providers and ambulatory settings is a primary care objective of the Oklahoma State Medical Association, and

WHEREAS, Oklahoma is divided into five geographic zones for Medicare/Medicaid reimbursement of physicians, and

WHEREAS, zone reimbursement differentials affect the availability, accessibility, quality, and cost of health care to Oklahomans, and

WHEREAS, current policies have created an increasing reimbursement differential between urban and rural zones, resulting in: (1) higher out-of-pocket costs to rural consumers, (2) a requirement of more physician visits in rural areas to meet the deductible, and (3) reimbursement discrimination against physician practices in small towns and rural areas, and

WHEREAS, 52% of the Medicare beneficiaries in the state currently live in the predominantly rural zone, and 57% of the state's primary care claims originate from physicians located in that zone, and

WHEREAS, the characteristics of urban/rural physician practices, demographic variation of the citizens in the current zones, prevailing charge determination, and the effect of the economic index provision have been examined, and

WHEREAS, this examination has indicated that the establishment of a single state-wide reimbursement zone would equalize out-of-pocket cost to consumers across Oklahoma; therefore, be it

Resolved, that the Oklahoma State Medical Association Board of Trustees encourage the Department of Health and Human Services to establish Oklahoma as a single state reimbursement area which will more equitably meet the health care needs of its citizens.

RESOLUTION: 10
(*REJECTED*)

INTRODUCED BY: Edward K. Norfleet, MD,
Tulsa

SUBJECT: Dissolution of OFPR

REFERRED TO: Reference Committee II

WHEREAS, there is no evidence that the Oklahoma Foundation for Peer Review was

wanted or desired by the members of the Oklahoma State Medical Association, and

WHEREAS, it is felt that the House of Delegates has effectively killed this organization by its action at the 1981 House of Delegates Meeting, when it was voted to let it die a natural death when the federal funds were discontinued, and

WHEREAS, it was felt that this could not be an effective agency in working with the private sector (See minutes of the House of Delegates 1981 Meeting) when the House of Delegates saw the Handwriting on the Wall (See the fifth chapter of Daniel) and voted to discontinue the OFPR when the Federal Funds were discontinued, and

WHEREAS, the American Medical Association is on record as opposing the continuation of Peer Review Organizations (See *American Medical News* of 3 April 1981), and

WHEREAS, it has been pointed out by Dr Joseph Boyle of the American Medical Association that the PSRO program was simply being used as a mechanism to place restraints on the cost of medical care instead of the continuing assurance of high quality medical care as initially envisioned by the American Medical Association; therefore be it

Resolved, that the Oklahoma State Medical Association continue in its previously stated mission of discontinuing the OFPR when the federal funds are discontinued, and be it further

Resolved, that the Oklahoma Foundation for Peer Review not be utilized for the review of *Private Sector Plans*, thereby relieving the Oklahoma State Medical Association of any financial responsibility in any such plans.

RESOLUTION: 11
(REJECTED)

INTRODUCED BY: Council on Long-Range Planning and Development
SUBJECT: Private Peer Review
REFERRED TO: Reference Committee II

Resolved, that the House of Delegates of the Oklahoma State Medical Association request the Board of Directors of the Oklahoma Foundation for Peer Review to develop and implement an independent free-standing organization to provide peer review services on a fee-for-service basis by October 1st, 1982.

SUBSTITUTE RESOLUTION FOR
RESOLUTIONS: 5, 10 and 11
(APPROVED)

INTRODUCED BY: Reference Committee II
SUBJECT: Private Peer Review
REFERRED TO: Reference Committee II

Resolved, that the House of Delegates of the Oklahoma State Medical Association recommend to the Board of Directors of the Oklahoma Foundation for Peer Review that it approve the participation of the Foundation in a program to provide fee-for-service review.

RESOLUTION: 12
(APPROVED)

INTRODUCED BY: Council on Medical Education
SUBJECT: Reciprocity of Continuing Medical Education Credits
REFERRED TO: Reference Committee I

WHEREAS, the American Medical Association-Physicians Recognition Award accepts the credits given to programs sponsored by the American Academy of Family Practice; and

WHEREAS, the AAFP will not accept those credits produced for the AMA-PRA; and

WHEREAS, this constitutes extra work and planning for CME Directors; therefore be it

Resolved, that the OSMA House of Delegates endorse dual reciprocity between the AMA-PRA and the AAFP; and be it further

Resolved, that this resolution be taken to the AMA House of Delegates and the House of Delegates of the AAFP.

RESOLUTION: 13
(APPROVED)

INTRODUCED BY: Council on Public and Mental Health
SUBJECT: Support of Clean Air
REFERRED TO: Reference Committee III

WHEREAS, the physicians of Oklahoma recognize the vital importance of clean air on human health; and

WHEREAS, significant progress has been made in recent years to lessen air quality degradation; and

WHEREAS, a major effort is underway in Congress to weaken the Clean Air Act; and

WHEREAS, this would make the citizens of Oklahoma more susceptible to respiratory and allergic disorders associated with air pollution; therefore be it

Resolved, that the Oklahoma State Medical Association support affirmative changes in the Clean Air Act which will relieve onerous and unnecessary burdens; and be it further

Resolved, that the OSMA encourage its congressional members to support the thrust of the current Clean Air Act and oppose any efforts to weaken it.

RESOLUTION: 14
(APPROVED)

INTRODUCED BY: OSMA Council on State Legislation
SUBJECT: County Medical Legislative Meetings
REFERRED TO: Reference Committee III

WHEREAS, the Oklahoma State Legislature is continually involved in funding and delivery of public and mental health care as well as medical education, and

WHEREAS, the legislature is comprised of elected officials from every county in the State, and

WHEREAS, the Oklahoma State Medical Association legislative council would like to increase its "grass roots" effectiveness in the legislature, be it

Resolved, that the Oklahoma State Medical Association legislative council encourage each county medical society to designate one of their regular meetings as a legislative awareness function by inviting their local legislators to discuss issues or simply to get acquainted.

RESOLUTION: 15
(APPROVED)

INTRODUCED BY: Oklahoma Medical Political Action Committee
SUBJECT: Membership Increase
REFERRED TO: Reference Committee III

WHEREAS, the Oklahoma State Medical Association House of Delegates passed a resolution in 1980, encouraging all members of OSMA to join OMPAC, and

WHEREAS, OMPAC membership still remains an embarrassingly low percentage of the potential OSMA membership, and

WHEREAS, OMPAC is approaching another election year with less than adequate funds to make a noticeable impact on political campaigns, and

WHEREAS, OMPAC membership surveys indicate a need to get "more" involved in state political campaigns, be it

Resolved, that the OSMA officers, delegates, trustees, and members be reminded of their past commitment to join OMPAC and be it further

Resolved, that all OSMA members show their intent and support for OMPAC by joining OMPAC during this annual meeting.

RESOLUTION: 16
(APPROVED AS AMENDED)

INTRODUCED BY: C. Alton Brown, MD
SUBJECT: Claims Made Insurance
REFERRED TO: Reference Committee I

WHEREAS, the House of Delegates is concerned that the members of the OSMA have available the best possible form of professional liability insurance at a reasonable price based upon the experience of Oklahoma doctors, and

WHEREAS, the OSMA and its members have acted to form Physicians Liability Insurance Company (PLICO) and to issue an occurrence form of professional liability policy which covers the insured doctor for claims which occur during the policy period *regardless* of when the claims are reported, and

WHEREAS, a claims made form of professional liability insurance policy will soon be offered in Oklahoma by a commercial insurance carrier, which form of policy provides coverage limited only to those claims which occur during the policy period *and* are reported during the term of the policy, and

WHEREAS, the claims made policy will be sold at a premium based upon rates which increase annually over a 5-year period, and

WHEREAS, in order to adequately protect himself and his patients, a doctor who purchases claims made coverage will have to purchase reporting endorsement coverage (coverage for claims made after the termination of the policy), and pay a premium in addition to the premiums charged during the term of the policy, thereby increasing the cost of a claims made policy, and

WHEREAS, the House of Delegates is concerned that some doctors may be deceived into purchasing the claims made form of policy by the apparently low first year premium and by not being fully informed as to the limitations on the coverage offered by such policy; therefore be it

Resolved, that the House of Delegates warns all doctors to carefully examine and understand the terms of coverage offered by a claims made form of professional liability insurance policy, and be it further

Resolved, that the House of Delegates urges the doctors to compare the cost of the PLICO occurrence policy to the true cost of a claims made policy, including the matured rate of premium and the cost of buying reporting endorsement coverage, and be it further

Resolved, it is the intent of this resolution that all of the doctors in the state be aware of the possible coverage problems arising out of the use of the claims made form of professional liability policy and not be deceived into purchasing such a policy without being fully advised of the coverage provided and the cost of such policy, and be it further

Resolved, that the Board of Trustees of the OSMA circulate this resolution and such other information as may be necessary to inform Oklahoma doctors as to the dangers of claims made insurance policies.

COMMENDATORY RESOLUTION

SUBJECT: Commendation of Harlan Thomas, MD, for His Services As An Oklahoma Delegate To American Medical Association
INTRODUCED BY: Tulsa County Medical Society

WHEREAS, Harlan Thomas, MD, has announced his retirement from the House of Delegates of American Medical Association after faithfully serving as an Oklahoma Delegate for a period of fifteen years, and

WHEREAS, Dr Thomas has served the AMA House of Delegates as a chairman or member of numerous reference committees and advisory bodies, and

WHEREAS, Dr Thomas, by the efficient performance of his duties and intelligent approach to the problems of American Medicine, has created warm feelings of friendship with leading physicians across the nation and has greatly enhanced the reputation of Oklahoma

State Medical Association at the national level, and

WHEREAS, Dr Thomas has also held multiple positions of significant leadership as an officer of Oklahoma State Medical Association, Tulsa County Medical Society, the American Academy of Family Physicians and other organizations, now therefore be it

Resolved, that Oklahoma State Medical Association commend Harlan Thomas, MD, for invaluable services as an Oklahoma Delegate to American Medical Association and in numerous other capacities of leadership, and be it further

Resolved, that Oklahoma State Medical Association express its deepest gratitude to Dr Thomas for his leadership and services, and be it further

Resolved, that the Oklahoma Delegation to the House of Delegates of American Medical Association introduce at the June, 1982 session a resolution expressing similar commendation and thanks for adoption by the AMA House of Delegates, and be it further

Resolved, that the House of Delegates of Oklahoma State Medical Association hereby bestows upon Harlan Thomas, MD, the Distinguished Service Award.

COMMENDATORY RESOLUTION

SUBJECT: Roy C. Lytle, LLB
INTRODUCED BY: OSMA Board of Trustees

WHEREAS, Roy Cook Lytle, Esquire, died on March 19, 1982; and

WHEREAS, Mr Lytle served as the Oklahoma State Medical Association's general counsel for more than 30 years; and

WHEREAS, he served in that capacity with distinction, honor and excellence; and

WHEREAS, Mr Lytle made other significant contributions to Oklahoma medicine, including being a founder of the Oklahoma Medical Research Foundation; therefore be it

Resolved, that the House of Delegates of the Oklahoma State Medical Association express its deep sense of loss, its sorrow and its appreciation for the distinguished and exemplary career of Roy C. Lytle to the physicians and citizens of the State of Oklahoma; and be it further

Resolved that the Oklahoma State Medical Association convey its respect and sympathy to his family. □



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References: 1. Shaw S, Lieber CS: Nutrition and alcoholism, chap. 40, in *Modern Nutrition in Health and Disease*, edited by Goodhart RS, Shils ME. Philadelphia, Lea & Febiger, 1980, pp. 1220, 1237. 2. Watkin DM: Nutrition for the aging and the aged, chap. 28, in *Modern Nutrition in Health and Disease*, op. cit., p. 781. 3. Shils ME, Randall HT: Diet and nutrition in the care of the surgical patient, chap. 36, in *Modern Nutrition in Health and Disease*, op. cit., pp. 1084, 1089, 1114. 4. Dixon RE: *Ann Intern Med* 89 (Part 2): 749-753, Nov 1978. 5. Committee on Dietary Allowances, National Research Council: Recommended Dietary Allowances, ed 9. Washington, National Academy of Sciences, 1980, p. 13.



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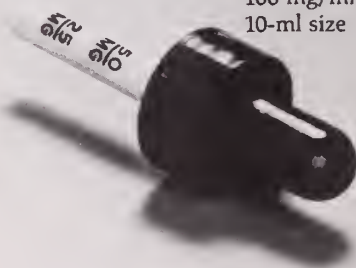
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References: 1. Data on file, Hoffmann-La Roche Inc., Nutley, NJ. 2. Zimmerman AM: *Curr Ther Res* 13:18-22, Jan 1971. 3. Greenblatt DJ, Allen MD, Shader RI: *Clin Pharmacol Ther* 21:355-361, Mar 1977. 4. Data on file, Hoffmann-La Roche Inc., Nutley, NJ. 5. Meyer JA, Kurland KZ: *Milit Med* 138:471-474, Aug 1973. 6. Feller HL, Gibbons B: *Med Times* 101(8):130-135, Aug 1973. 7. Jacobson A et al: *Psychophysiology* 7:345, Sep 1970. 8. Frost JD Jr, DeLucchi MR: *J Am Geriatr Soc* 27:541-546, Dec 1979. 9. Kales A, Scharf MB, Kales JD: *Science* 201:1039-1041, Sep 1978. 10. Kales A et al: *JAMA* 241:1692-1695, Apr 1979. 11. Monti JM: *Methods Find Exp Clin Pharmacol* 3(5):303-326, 1981.

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Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. An additive effect may occur if alcohol is consumed the day following use for nighttime sedation. This potential may exist for several days following discontinuation. Caution against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Potential impairment of performance of such activities may occur the day following ingestion. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, abrupt discontinuation should be avoided with gradual tapering of dosage for those patients on medication for a prolonged period of time. Use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, lightheadedness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase; and paradoxical reactions, e.g., excitement, stimulation and hyperactivity.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg recommended initially until response is determined.

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It all adds up,

in today's major hypertension studies

VA Study¹

- 450 patients studied
- Mild to moderate hypertensives
- Comparison of propranolol and reserpine for Step-2 antihypertensive therapy
- **Conclusion:** when added to a thiazide diuretic, reserpine was effective in a larger percentage of patients (88%) than was propranolol (81%)!

HDFP Study²

- More than 10,000 patients studied
- Conducted at 14 centers over 5 years
- Proved that compliance with Step Care lowers death rate from all cardiovascular causes
- **Conclusion:** reserpine-thiazide regimens were preferred for Step-2 therapy, and were deemed effective, without significant adverse effects!

MRFIT Study³

- 6-year, 12,000-patient study, to be completed in 1982
- Assesses factors that may increase risk of cardiovascular disease
- Preferred Step-2 regimen: reserpine-thiazide
- **Full year's data:** reserpine is causing less depression than methyldopa, diuretics, or placebo!

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Brief Summary of Prescribing Information (12) 10/27/78
For complete information consult Official Package Circular.

WARNING

This fixed combination drug is not indicated for initial therapy of hypertension. Hypertension requires therapy titrated to the individual patient. If the fixed combination represents the dosage so determined, its use may be more convenient in patient management. The treatment of hypertension is not static, but must be reevaluated as conditions in each patient warrant.

CONTRAINDICATIONS

Anuria, oliguria, active peptic ulceration, ulcerative colitis, severe depression or hypersensitivity to its components contraindicates the use of Salutensin.

WARNINGS

Small-bowel lesions (obstruction, hemorrhage, perforation and death) have occurred during therapy with enteric-coated formulations containing potassium, with or without thiazides. Such potassium formulations should be used with Salutensin only when indicated and should be discontinued immediately if abdominal pain, distention, nausea, vomiting or gastrointestinal bleeding occurs. Use cautiously, and only when deemed essential, in fertile, pregnant or lactating patients.

Use in Pregnancy—Thiazides cross the placenta and can cause fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly electrolyte disturbances. Fatal reactions may occur with reserpine during electroshock therapy; discontinue Salutensin 2 weeks before such therapy. Increased respiratory secretions, nasal congestion, cyanosis and anorexia may occur in infants born to reserpine-treated mothers.

PRECAUTIONS

Azotemia, hypochloremia, hyponatremia, hypochloremic alkalosis and hypokalemia (especially with hepatic cirrhosis and corticosteroid therapy) may occur, particularly with pre-existing vomiting and diarrhea. Potassium loss may cause digitalis intoxication. *Potassium loss responds to potassium-rich foods, potassium chloride or, if necessary, discontinuation of therapy.* Serum ammonia elevation may precipitate coma in precomatose hepatic cirrhosis. Discontinue therapy 2 weeks before surgery or if myocardial irritability, progressive azotemia or severe depression occur. Exercise caution in patients with chronic uremia, angina pectoris, coronary thrombosis or extensive cerebral vascular disease or bronchial asthma and in those with a history of peptic ulceration or bronchial asthma; in post-sympathectomy patients; in patients on quinidine; and in patients with gallstones, in whom biliary colic may occur. Patients who have diabetes mellitus or who are suspected of being prediabetic should be kept under close observation if treated with this agent.

ADVERSE REACTIONS

Hydroflumethiazide—Skin-rashes (including exfoliative dermatitis), skin photosensitivity, urticaria, necrotizing angitis, xanthopsia, granulocytopenia, aplastic anemia, orthostatic hypotension (potentiated with alcohol, barbiturates or narcotics), allergic glomerulonephritis, acute pancreatitis, liver involvement (intrahepatic cholestatic jaundice), purpura plus or minus thrombocytopenia, hyperuricemia, hyperglycemia, glycosuria, malaise, weakness, dizziness, fatigue, paresthesias, muscle cramps, skin rash, epigastric distress, vomiting, diarrhea and constipation.

Reserpine—Depression, peptic ulceration, diarrhea, Parkinsonism, nasal stuffiness, dryness of the mouth, weight gain, impotence or decreased libido, conjunctival injection, dull sensorium, deafness, glaucoma, uveitis, optic atrophy, and, with overdosage, agitation, insomnia and nightmares.

USUAL DOSE

The usual adult dose of Salutensin is one tablet once or twice daily. If a smaller amount of thiazide diuretic is desired, Salutensin-Demi, one tablet once or twice daily can be given.

SUPPLIED

Bottles of 10 and 1000 scored tablets.

REFERENCES

1. Propranolol in the treatment of essential hypertension. Veterans Administration Cooperative Study Group on Antihypertensive Agents. *JAMA* 237:2303-2310, 1977.
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3. Moser M, Kaplan NM, Sullivan JM, Paul O, in discussion: Perspectives on MRFIT. Can the interim data be applied to your practice. . .? An Interim Report on the Ongoing Multiple Risk Factor Intervention Trial: MRFIT. *New Perspectives on Hypertension* 2(1):10-19, February 1981.

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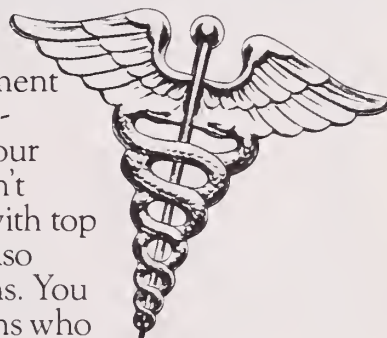
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The JOURNAL

of the Oklahoma State Medical Association

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STYLE

Footnotes, bibliographies, and legends for illustrations should be submitted on separate sheets, double-spaced. Bibliographies should follow in order of: name and author, title or article, name of periodical with volume number, page and date of publication. These references should be numbered in the sequence in which they appear in the article.

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NEWS

Members of the Oklahoma State Medical Association, the constituent societies of the association, and all readers in general are invited to supply news items of general interest to the profession.

ADVERTISING

All advertising copy must be approved by the Editorial Board before acceptance for publication. General and miscellaneous advertising rates will be sent on request.

EDITING SERVICE

The Editorial Board reserves the prerogative to submit contributions to a Medical Editing Service when warranted. If such is felt necessary, the Editor will contact the author for approval, informing him that there will be a modest charge for this service.

REPRINTS

Authors will receive reprint order forms from the Transcript Press, P.O. Drawer 1058, Norman, Oklahoma 73070, prior to final publication of their articles. Other requests for reprints must be made to the Transcript Press within 30 days after publication.

BACK ISSUES

Microfilm copies of back issues of *The Journal* may now be purchased from University Microfilms International, 300 North Zeeb Road, Ann Arbor, Michigan 48106.

William R. Kirkham, MD, of Oklahoma City, has been given the Aerospace Medical Association award for outstanding contributions to aviation safety. Dr Kirkham is chief of the FAA Civil Aeromedical Institute aviation toxicology laboratory. He received the award in recognition of his studies of human factors in aircraft accidents, his successful efforts to correct defects in aircraft occupant-restraint systems, and his teachings in the area of flight safety.

The Oklahoma State Dermatological Society has named its new officers for 1982-83. They are Frederic W. Stearns, MD, of Tulsa, as society president and Jeff Alexander, MD, of Tulsa, as secretary-treasurer.

John Byrne is the new administrator of the Oklahoma Children's Memorial Hospital in Oklahoma City. Byrne, who assumed the post in May, served 19 years as administrator of Children's Medical Center in Tulsa, a 100-bed psychiatric and long-term care center for children. Prior to joining Children's Memorial Hospital, he operated a medical consulting firm. Byrne was instrumental in forming the National Association of Children's Hospitals and Related Institutions, Inc, which he served as president during 1976-77.

The Oklahoma Department of Human Services reminds physicians that medical claims submitted after July 1 must include an ICD-9-CM diagnosis code in order to be processed. Any medical claims submitted without proper diagnosis coding will be returned. Abridged code books are available to physicians from the Department of Human Services in Oklahoma City.

The Occupational Safety and Health Administration of the US Department of Labor is requesting information from the medical pro-

fession that might suggest an unusual incidence of health problems stemming from the use of carbonless copy paper. Any physician who has noticed an unusual frequency of irritation of the eyes, mucous membranes, or skin that may be associated with the use of carbonless copy paper should notify the Division of Scientific Policy, Richard J. Jones, MD, Director, at AMA Headquarters, 535 N. Dearborn St., Chicago, IL 60610.

Gordon E. Deckert, MD, professor and chairman, Department of Psychiatry and Behavioral Sciences, University of Oklahoma Health Sciences Center, delivered the commencement address on May 29 to the 130th graduating class of the Georgetown University School of Medicine. He also received an honorary degree of doctor of science from Georgetown in recognition of his accomplishments and contributions as an educator and psychiatrist. Dr Deckert joined the faculty of the Health Sciences Center in 1959 and was named to his current posts as professor and department chairman in 1969.

The Board of Trustees of the American Medical Association has approved a plan to hold a series of meetings between members of the AMA board and presidents and presidents-elect of state medical associations prior to each AMA annual and interim meeting. The meetings will be designed to improve communication between the AMA board and officers of state associations. Details of the program will be announced later.

Medical students and other students in allied health programs received more than \$818,000 in scholarships and loans from state and county medical auxiliaries during the 1980-81 fiscal year, according to the American Medical Association. The funds were collected through auxiliary campaigns, auxiliary budget allocations, and direct contributions from physicians and auxiliary members. □

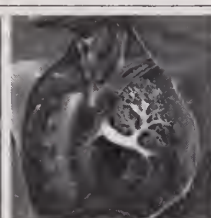
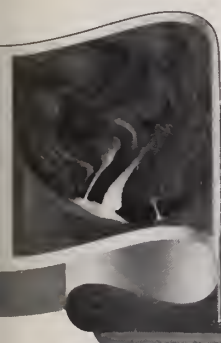
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Warnings: BACTRIM SHOULD NOT BE USED TO TREAT STREPTOCOCCAL PHARYNGITIS. Clinical studies show that patients with group A β -hemolytic streptococcal tonsillopharyngitis have higher incidence of bacteriologic failure when treated with Bactrim than do those treated with penicillin. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.

Precautions: General: Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function. Bactrim may prolong prothrombin time in those receiving warfarin; reassess coagulation time when administering Bactrim to these patients.

Pregnancy: Teratogenic Effects: Pregnancy Category C. Because trimethoprim and sulfamethoxazole may interfere with folate acid metabolism, use during pregnancy only if potential benefits justify the potential risk to the fetus.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. Blood dyscrasias: Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. Allergic reactions: Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. Gastrointestinal reactions: Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea, pseudomembranous colitis and pancreatitis. CNS reactions: Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. Miscellaneous reactions: Drug fever, chills, toxic nephrosis with oliguria and anuria, periarthritis nodosa and L.E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

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For patients with renal impairment: Use recommended dosage regimen when creatinine clearance is above 30 ml/min. If creatinine clearance is between 15 and 30 ml/min, use one-half the usual regimen. Bactrim is not recommended if creatinine clearance is below 15 ml/min.

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1. Rubin RH, Swartz MN: *N Engl J Med* 303:426-432, Aug 21, 1980 2. Data on file, Medical Department, Hoffmann-La Roche Inc.

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CARDIAC FAILURE Sympathetic stimulation is a vital component supporting circulatory function in congestive heart failure, and inhibition with beta-blockade always carries the potential hazard of further depressing myocardial contractility and precipitating cardiac failure. INDERAL acts selectively without abolishing the inotropic action of digitalis on the heart muscle. In that of supporting the strength of myocardial contractions. In patients already receiving digitalis, the positive inotropic action of digitalis may be reduced by INDERAL's negative inotropic effect. The effects of INDERAL and digitalis are additive in depressing AV conduction.

IN PATIENTS WITHOUT A HISTORY OF CARDIAC FAILURE continued depression of the myocardium over a period of time can, in some cases, lead to cardiac failure. In rare instances, this has been observed during INDERAL therapy. Therefore, at the first sign or symptom of impending cardiac failure, patients should be fully digitalized and/or given a diuretic, and the response observed closely. a) if cardiac failure continues, despite adequate digitalization and diuretic therapy, INDERAL therapy should be immediately withdrawn; b) if tachyarrhythmia is being controlled, patients should be maintained on combined therapy, and the patient closely followed until threat of cardiac failure is over.

IN PATIENTS WITH ANGINA PECTORIS there have been reports of exacerbation of angina and, in some cases, myocardial infarction following abrupt discontinuation of INDERAL therapy. Therefore, when discontinuance of INDERAL is planned, the dosage should be gradually reduced and the patient carefully monitored. In addition, when INDERAL is prescribed for angina pectoris, the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If INDERAL therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute INDERAL therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease, who are given propranolol for other indications.

IN PATIENTS WITH THYROTOXICOSIS possible deleterious effects from long term use have not been adequately appraised. Special consideration should be given to propranolol's potential for aggravating congestive heart failure. Propranolol may mask the clinical signs of severe hypothyroidism or complications and give a false impression of improvement. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. This is another reason for withdrawing propranolol slowly. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

IN PATIENTS DURING ANESTHESIA with agents that require catecholamine release for maintenance of adequate cardiac function, beta blockade will impair the desired inotropic effect. Therefore, INDERAL should be titrated carefully when administered for arrhythmias occurring during anesthesia.

IN PATIENTS UNDERGOING MAJOR SURGERY beta blockade impairs the ability of the heart to respond to reflex stimuli. For this reason, with the exception of pheochromocytoma, INDERAL should be withdrawn 48 hours prior to surgery at which time all chemical and physiologic effects are gone according to available evidence. However, in case of emergency surgery, since INDERAL is a competitive inhibitor of beta receptor agonists, its effects can be reversed by administration of such agents, e.g., isoproterenol or levaterenol. However, such patients may be subject to protracted severe hypotension. Difficulty in restarting and maintaining the heart beat has also been reported.

IN PATIENTS PRONE TO NONALLERGIC BRONCHOSPASM (e.g., CHRONIC BRONCHITIS, EMPHYSEMA) INDERAL should be administered with caution since it may block bronchoconstriction produced by endogenous and exogenous catecholamine stimulation of beta receptors.

DIABETICS AND PATIENTS SUBJECT TO HYPOGLYCEMIA Because of its beta-adrenergic blocking activity, INDERAL may prevent the appearance of premonitory signs and symptoms of hypoglycemia and pressure changes of acute hypoglycemia. This is especially important in keeping mind in patients with labile hypoglycemia. Hypoglycemic attacks may be accompanied by unpredictable elevation of blood pressure.

USE IN PREGNANCY The safe use of INDERAL in human pregnancy has not been established. Use of any drug in pregnant or women of childbearing potential requires that the expected benefits be weighed against the expected therapeutic benefit.

Embryotoxic effects have been seen in animal studies at doses about 10 times the maximum recommended human dose.

PRECAUTIONS

Patients receiving catecholamine-depleting drugs such as reserpine should be closely observed. INDERAL is administered. The added catecholamine blocking action of this drug may then produce an excessive reduction of the resting sympathetic nervous activity. Occasionally, the pharmacologic activity of INDERAL may produce hypotension and/or marked bradycardia resulting in vertigo, syncopal attacks, or orthostatic hypotension.

As with any new drug given over prolonged periods, laboratory parameters should be observed at regular intervals. The drug should be used with caution in patients with impaired renal or hepatic function.

ADVERSE REACTIONS

Cardiovascular bradycardia, congestive heart failure, intensification of AV block, hypotension, paresthesia of hands, arterial insufficiency, usually of the Raynaud type, thrombocytopenic purpura.

Central Nervous System light-headedness, mental depression, manifested by insomnia, lassitude, weakness, fatigue, reversible mental depression progressing to cataplexy, visual disturbances, hallucinations, an acute reversible syndrome characterized by disorientation of time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometric tests.

Gastrointestinal nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis.

Allergic pharyngitis and agranulocytosis, erythematous rash, fever combined with ach and sore throat, laryngospasm and respiratory distress.

Respiratory bronchospasm.

Hematologic agranulocytosis, neutrophilic leukocytopenia, thrombocytopenic purpura, thrombocytopenic purpura.

Miscellaneous reversible amnesia, ocular uveitis, cutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta blocker (practolol) have not been conclusively associated with propranolol.

Clinical Laboratory Test Findings Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

ORAL

DOSEAGE AND ADMINISTRATION

HYPERTENSION—Dosage must be individualized. The usual initial dosage is 40 mg INDERAL twice daily, whether by capsule or added to a diuretic. Dosage may be increased gradually until adequate blood pressure is achieved. The usual dosage is 160 to 480 mg per day. In some instances a dosage of 640 mg may be required. The time needed for full hypotensive response to a given dosage is variable and may range from a few days to several weeks.

While twice daily dosing is effective and can maintain a reduction in blood pressure throughout the day, some patients, especially when lower doses are used, may experience a modest rise in blood pressure toward the end of the 12 hour dosing interval. This can be evaluated by measuring blood pressure near the end of the dosing interval to determine whether satisfactory control is being maintained throughout the day. If control is not adequate, a larger dose or 3 times daily therapy may achieve better control.

PEDIATRIC DOSAGE

At this time the data on the use of the drug in this age group are too limited to permit adequate directions for use.

INTRAVENOUS

The intravenous administration of INDERAL has not been evaluated adequately in the management of hypertensive emergencies.

OVERDOSAGE OR EXAGGERATED RESPONSE

IN THE EVENT OF OVERDOSAGE OR EXAGGERATED RESPONSE, THE FOLLOWING MEASURES SHOULD BE EMPLOYED:

BRADYCARDIA—ADMINISTER ATROPINE (0.25 to 1.0 mg). IF THERE IS NO RESPONSE TO VAGAL BLOCKADE, ADMINISTER ISOPROTERENOL CAUTIOUSLY.

CARDIAC FAILURE—DIGITALIZATION AND DIURETICS.

HYPOTENSION—VASOPRESSORS, e.g., LEVATERENOL OR EPINEPHRINE (THERE IS EVIDENCE THAT EPINEPHRINE IS THE DRUG OF CHOICE).

BRONCHOSPASM—ADMINISTER ISOPROTERENOL AND AMINOPHYLLINE.

HOW SUPPLIED

TABLETS		INDERAL (propranolol hydrochloride)	
No. 461	Each scored tablet contains 10 mg of propranolol hydrochloride in bottles of 100 and 1,000. Also in unit dose package of 100.		
No. 462	Each scored tablet contains 20 mg of propranolol hydrochloride in bottles of 100 and 1,000. Also in unit dose package of 100.		
No. 464	Each scored tablet contains 40 mg of propranolol hydrochloride in bottles of 100 and 1,000. Also in unit dose package of 100.		
No. 468	Each scored tablet contains 80 mg of propranolol hydrochloride in bottles of 100 and 1,000. Also in unit dose package of 100.		

INJECTABLE

No. 3265 Each ml contains 1 mg of propranolol hydrochloride in Water for Injection. The pH is adjusted with citric acid. Supplied as 1 ml ampules in boxes of 10.

Reference: 1. Freis, E.D. Hypertension (Suppl. 1) 3:230 (Nov-Dec) 1981.

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There is no experience in pregnant women who have received this drug.

The drug has not been extensively studied in children under two years; therefore, in the treatment of children under the age of two years, the relative benefit/risk should be considered.

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Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with pre-existing liver dysfunction.

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Retrolental Fibroplasia: A Resurgent Problem

Retrolental fibroplasia (RLF), or preferably retinopathy of pre-maturity, is a retinal disorder which occurs most frequently in premature infants who have required supplemental oxygen to sustain life. This disease has in effect come full circle. By about 1950, the disorder had reached epidemic proportions and had become the leading cause of blindness in children in this and other developed countries. After identification of at least one of the causes of the disorder, RLF decreased sharply. However, the past few years has seen the disease reemerging; in fact, the resurgence has been striking. Moreover, the RLF story affords a classic example of a dilemma facing the clinician who has responsibility for the newborn infant — balancing the risks and benefits of an indispensable method of treatment. Thus, it is, pertinent to examine the reasons for the dramatic increase in the incidence of RLF and new aspects of this issue.

Retrolental fibroplasia was recognized in 1941 as an acquired disease in premature infants.¹ Terry² in the following year published the first histologic description. The name "retrolental fibroplasia" was based on his finding of a fibrovascular membrane that involved the retina and was located posterior to the lens of the eye.³ The incidence of the disease began to exhibit a dramatic increase and by 1952 it was widespread and in fact had reached epidemic proportions.¹ It occurred chiefly in prematurely-born infants, particularly those in major medical centers; this suggested that the treatment methods then used for premature infants might be causal. During that period, oxygen was routinely administered for extended periods to almost all premature infants. Arterial blood gas monitoring was not possible, nor was its necessity recognized, and the ambient oxygen tensions to which infants were exposed varied widely, depending on incubator design and methods of delivery of oxygen. In 1949, Owens and Owens⁵ noted that the disease was less common in premature infants receiving vitamin E supplements, but their findings were not confirmed by others. Also in 1948, Kinsey and Zacharias⁶ reported that blindness from RLF was associated with more liberal use of oxygen therapy, among other factors.³

The rationale of oxygen to explain the oc-

currence of RLF was enumerated by Campbell⁷ in 1951. This hypothesis was given further support by the controlled clinical studies of Patz⁸ *et al* begun in 1951. It was followed first by the trial by Lanman and colleagues⁹ in New York and then by the large multicenter study coordinated by V. E. Kinsey.¹⁰ The results of this cooperative study of RLF were first announced in September 1954. They confirmed the role of hyperoxia in RLF, and a sharp and uniform curtailment of oxygen therapy promptly followed throughout the United States. Subsequently, the incidence of RLF quickly dropped below the level of clinical awareness.¹¹ The severe forms were rarely seen in the 1960s.³

Unfortunately, an increased morbidity and mortality rate among premature infants, especially those with respiratory distress syndrome (RDS) was associated with this decrease in oxygen use. It was first clearly documented by the 1960 report from Johns Hopkins on mortality rates from RDS in the years before and after curtailment of oxygen use. Out of this survey — and confirmatory mortality and morbidity statistics from England in 1963 and 1973 — came the still extant recommendations that ambient oxygen concentrations be regulated on the basis of individual need.¹¹ Thus, physicians were advised to maintain arterial oxygen tensions high enough to assure preservation of life and intact nervous system, using whatever ambient oxygen tension was needed to do so; hyperoxia was to be avoided.¹¹

The possibility for successful implementation of this approach was greatly advanced with introduction of new methods of monitoring the use of supplemental oxygen. Today, the delivery of oxygen to the blood stream is monitored by frequent micro-blood gas determinations and is accomplished by means of versatile infant respirators which have made possible greatly increased survival rates, even among infants so immature as to have been considered nonviable only five years ago.¹¹ However, accurate, continuous surveillance of arterial oxygen tensions is still not possible, and achievement of an optimal oxygen environ-

editorial

ment for growth of the fetus outside the uterus remains a yet-to-be achieved goal.¹¹ On occasion, especially in the most vulnerable infants, the sequela of hypoxia (spasticity) and hyperoxia (RLF) may be seen in the same infant.¹¹

Several studies have shown the incidence of RLF to be inversely related to birth weight and gestational age, and a strong association has been found between it and the duration of supplemental oxygen therapy.^{1, 13}

The stimulant leading to the abnormal vasoproliferation in RLF is generally considered to be local retinal anoxia; this may occur with vasoconstriction of the retinal arteries in response to hyperoxia. The earliest phase in the development of retrolental fibroplasia is attenuation of the retinal vessels, followed by stage I of the disease, in which the vessels become dilated and tortuous, and also there may be hemorrhage and early neovascularization of the peripheral retina. As stage II develops, neovascularization becomes more obvious and the peripheral retina becomes cloudy. At this rate, spontaneous arrest and regression of the process are still possible. There may, however, be progression to peripheral retinal detachment (stages III and IV), and even to total retinal detachment (stage V). The active stages of retrolental fibroplasia are followed by varying degrees of scarring and loss of vision, or the process may arrest with some retention of vision. "Dragged" disc (or more accurately, "dragged" retina), myopia, microphthalmia, and strabismus are often present in arrested cases.¹⁴

The adverse effects of increased concentrations of oxygen on immature retinal vasculature have been identified, but other variables and biologic factors must be considered. Retrolental fibroplasia may occur in premature infants who have not received supplemental oxygen; in fullterm infants, retrolental fibroplasia may even develop in utero.¹⁴

RLF has also been observed in cyanotic children¹³ and in stillborn infants.³ Moreover, there is wide variability in the severity of the disease among infants receiving approximately equal amounts of oxygen.

There is increasing evidence of constitutional differences in susceptibility among infants to oxygen toxicity.¹¹ That RLF is still seen in the various neonatal intensive care

units suggests that our understanding of its pathogenesis and the categorization of high-risk infants, as well as the method of monitoring oxygen therapy, are far from perfect and require continuing research efforts.¹⁵

The past ten or so years has witnessed a striking resurgence in the incidence of RLF. This increase in incidence is due apparently not only to the more liberal use of oxygen in the RDS to prevent cerebral damage and to decrease mortality but also on the significantly prolonged survival of premature infants of very low birth weight due in large part to modern neonatal intensive-care units. The increase in RLF stimulated the conduct of another multicenter cooperative trial which had as its primary objective the determination of safe levels of supplemental oxygen.¹² Unfortunately, it was not possible to make a recommendation for a safe level of arterial oxygen that would prevent both central nervous system damage and RLF.³ Thus, the dilemma of the clinician caring for a newborn in balancing the risks against the benefits of oxygen therapy continues unabated and the problem of RLF persists. Certain guidelines which can be utilized in handling infants at high risk for RLF have been enunciated.

The results of recent studies concerning the incidence and other aspects of RLF place the overall incidence of RLF in the under 2,000 gram birth weight group at about 20 percent. Approximately 30 per cent of infants with birth weights under 1,500 grams are affected, between 4 per cent and 8 per cent having disease of at least moderate severity. About half of such cases continue to progress to active RLF of grade 3+ or more. A high incidence of blindness follows disease of this severity. Based on census figures for 1978 and survival figures at Pennsylvania Hospital for the under 1,500 gram birth weight group, Johnson¹¹ states that somewhere between 400 and 450 cases of blinding RLF can be expected to occur in the United States each year under the present circumstances.¹¹

Based on birth-weight-specific published survival statistics and RLF incidence data, the number of infants blinded from RLF in the United States in 1979 was estimated to 546. Approximately 2,100 infants will be affected annually by cicatricial sequelae including myopia, strabismus, blindness, and possible late retinal detachment.¹⁶

Recently, studies of the efficacy of vitamin E

in decreasing the incidence and severity of RLF have been resumed.¹¹⁻¹⁷ Vitamin E appears to have two mechanisms of action in RLF: a direct antioxidant effect during periods of hyperoxia and a suppressive effect on the formation of new vessels.³ The preliminary results of the trials investigating the prophylactic and therapeutic use of vitamin E in RLF are encouraging. However, reflecting on the lessons already learned about therapeutic agents in RLF, definite recommendations must await long-term results.

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The 1982 Annual Meeting of the American Medical Association was held in Chicago June 11 through June 17. The most important action of the House of Delegates at that meeting was the adoption of the Board of Trustees Report S, a plan for the development of Health Priorities in the United States which had been under consideration by the Board for several months. The report of the Board stated: "At its February meeting the Board of Trustees identified the need for a National Health Policy to be developed by the private sector with leadership from AMA. The envisioned National Health Policy must be more than just a set of proposals to be considered by the upcoming Congress or the federal government. Rather, it must be a broad-based outline of major concerns for health, including both private sector and public elements, for the foreseeable future. It will provide a conceptual and philosophical framework that will be consistent over a multiple-year period as the basis for specific action plans and proposals that are responsive to the particular social, economic, scientific, educational, and political circumstances that evolve from year to year. The National Health Policy will provide the opportunity for AMA and others in the health sector to abandon the traditional year-by-year piecemeal development of health policy in response to the short-term pressures of the moment in favor of a long-term, considered approach that will stand the test of time."

It is proposed that the National Health Policy, renamed by the House of Delegates "Health Priorities in the United States," have a set of basic principles that reflect a philosophy and approach to the various policy arenas encompassed by the health sector. Once the basic principles are established, there would exist a rational basis for developing a health policy plan for a specific period of time. When these objectives are accomplished, the AMA will have a good foundation on which to



analyze and evaluate the proposals of other organizations and institutions, including various levels of government, and to respond to any proposals by reference to the basic principles and philosophy and to the developed health policy.

The presentation of this plan produced much testimony in the reference committee, and debate was long in the House of Delegates. Concerns regarding retention of control of the plan's basic principles and philosophy by the House were expressed and were answered by members of the Board. A thorough airing of the project was heard, and it appeared to be well accepted, and with enthusiasm.

This is indeed a far-reaching, ambitious, and comprehensive plan to solve one of our country's greatest problems. In fact, as one contemplates the ramifications of this concept, it becomes mind-boggling. The Fiscal Note for this project estimates the equivalent of fifty man-years of effort per year, plus travel costs, for a total of 1.5 million dollars per fiscal year for a minimum of two years.

There has not been a time in the past, and may not be in the future, when the political and economic atmosphere in the United States has been as amenable to this concept as is now the case. The intense concern and interest of all the citizens of our country in matters of personal and public health provide the necessary catalyst for the essential cooperation and assistance required by this plan for fruition. The basic feelings of responsibility held by the medical profession for the provision of quality health care, available to all, and which is cost efficient, are a very real and pervading consideration for all physicians. The development of Health Priorities in the United States provides a nidus of opportunity to be of the utmost service to the future of Medical and Ancillary Services care. It is a sweeping concept, and will require patience and diligence as well as many hours of hard work to develop. This plan deserves our enthusiastic and unlimited support.

John A. McIntyre, M.D.

Rocky Mountain Spotted Fever

A Case Presentation With Discussion of Fatal Complications

THOMAS J. PURGASON, MD

Rocky Mountain spotted fever is a treatable disease if recognized by the physician and appropriate treatment is started.

Abstract

This article presents the various manifestations of Rocky Mountain spotted fever (RMSF) with particular emphasis on points concerning fatal cases. The usual manner of presentation includes fever, petechial rash beginning on the extremities, headache, malaise, myalgias, and history of tick bite. Diagnosis by laboratory means usually occurs at a time when specific therapy should already have been curative. Death from RMSF remains a significant problem, and fatal cases are associated with; (a) delay in therapy past six days after onset of illness associated with misdiagnosis; (b) de-

layed onset of the rash; (c) a later history of tick bite, or no history of tick bite and a delay in therapy. Tetracycline and chloramphenicol are the drugs of choice for treatment of RMSF.

The Patient

This previously healthy 25-year-old male presented to the Hillcrest Medical Center on May 15, 1980 after lapsing into an unconscious state. The patient had been seen at another facility on May 12, 1980 with a five-day history of nausea and vomiting, headache, high fever and myalgias. Physical examination at the other facility revealed an erythematous throat, no rash and a temperature of 103.6 degrees Fahrenheit. The laboratory values were unremarkable except for a white blood cell count of 5.1 M/mm³ with a differential of 47% segs, 31% bands, 15% lymphs. Pain medications were given and the patient was discharged. The patient returned to the same facility on May 14, 1980 with similar complaints and physical findings. Laboratory examination revealed protein and red cells in the patient's urine, a peripheral blood white blood cell count of 4.5 M/mm³, 40% segs, 50% bands, 6% monos, and 4% lymphs. The patient was started on ampicillin and discharged. At home, the patient's fever persisted and he generally worsened with complaints of headache being prominent.

From the University of Oklahoma, Tulsa Medical College.

RMSF / PURGASON

When he lapsed into a coma, he was brought to the emergency room by friends. A history of the patient removing ticks from his dog was elicited from his friends in the emergency room. Physical examination revealed a temperature of 97.6 degrees Fahrenheit, pulse 98/mm, blood pressure 138/70, and respirations 28/min. Generally, the patient was unconscious and unresponsive. A small ecchymotic area was noted in the right temporoparietal region. Lung examination revealed coarse rhonchi in all fields, and the heart rate and rhythm were normal without murmur, gallop or rub. Stool examination revealed brown fecal material that contained occult blood. Skin examination revealed a purpuric rash with prominence noted over the chest, upper extremities, and petechial lesions were seen on the palms and dorsum of the feet. Initial laboratory studies revealed a hematocrit of 47% and a hemoglobin of 16.8 gm%. There were 8.5 m white blood cells/mm³ with 64% segs, 28% bands, 4% lymphs, 4% monos and platelets

"RMSF is an acute febrile illness . . . most often seen in the eastern United States, although it is present throughout the country."

were 12,000/mm³. Electrolyte determination revealed a sodium of 121 mg%, a potassium of 3.3 mg%, chloride of 76 mg%, carbon dioxide of 9mg%, blood urea nitrogen of 93mg%, and a glucose of 209mg%. Arterial blood gases revealed a pH of 7.25, a pCO₂ of 28 mmHg, a pO₂ of 90 mmHg and other values obtained were a PTT of 42 sec, and a PT of 13.8 sec. An initial chest x-ray revealed normal-appearing heart and lungs.

The patient was admitted to the intensive care unit with a suspected diagnosis of RMSF, and appropriate therapy was begun (chloramphenicol succinate 1g intravenous q 6h). Initially, the patient had problems with seizures but these were controlled with intravenous diazepam and intravenous phenobarbital. The patient soon developed oliguria and an adult respiratory distress syndrome picture, and de-

spite all intensive care efforts, died of cardio-respiratory arrest approximately six hours after his admission.

An autopsy was performed and the findings were consistent with RMSF with disseminated intravascular coagulopathy. A generalized, petechial rash was noted and there were multiple petechiae over the pericardial surfaces as well as the stomach. It was felt that all findings were consistent with the vasculitis associated with RMSF.

Etiology and Pathogenesis

RMSF is an acute febrile illness caused by *Rickettsia rickettsii* and is most often seen in the eastern United States, although it is present throughout the country. Four species of ticks are the most widely recognized carriers of *Rickettsia rickettsii*, and include the wood tick (*D andersoni*) and the dog tick (*D variabilis*). Tick bite is the way the rickettsia is introduced into its human host, although crushing ticks in an attempt to remove them may also introduce the organism. A large number and variety of wild animals are hosts for the ticks, but the domestic dogs appear to be the most important source of risk for tick acquisition.

After introduction of the organism the incubation period ranges from two to 14 days with an average of seven days. It is reported that a shorter incubation period is often followed by a more severe course. The period following incubation is marked by a sudden onset of the clinical manifestations of RMSF, although prodromes are not uncommon. With disease onset, headache, rigors, malaise, myalgias (especially of the back and legs), nausea with occasional vomiting, conjunctival injections, photophobia, and fever up to 39-40 degrees centigrade are reported. If untreated RMSF is present, the fever will continue and may last two to three weeks after the onset of disease. A rash usually begins about the fourth day and is generally discrete pink macules beginning on the extremities. The rash extends to the trunk, buttocks, face and neck as a maculopapular lesion. By the fourth day of its occurrence the rash becomes darker red and purplish and is usually petechial. It is reported by one group of investigators that the clinical syndrome of RMSF without evident rash is one factor involved in fatal cases.¹

Pathologically, the most common occurrence is a characteristic acute vasculitis with throm-

basis of the affected vascular lumen being a common occurrence. In affected vessels a perivascular leukocyte inflammatory infiltration occurs with the brain, heart, testes, skin, serosal membranes, skeletal muscles, lungs, and kidneys being favored locations. In RMSF the vascular lesions which give rise to the rash may lead to acute necrosis and thrombosis of small blood vessels in the skin, and the rash may even contain small foci of necrotic skin. In widespread RMSF hemorrhages and microinfarcts are noted in affected tissue, and if examined microscopically, the typical vasculitis picture will be evident.⁶

"It is reported . . . that the clinical syndrome of RMSF without evident rash is one factor involved in fatal cases."

Diagnosis by laboratory means is not always possible in the face of a suspect clinical setting, but there are a few tests that are helpful. RMSF, like other rickettsial infections, evokes antibodies that cross react with certain strains of *Proteus bacillus*. In RMSF, both *Proteus* 0X19 and 0X2 agglutinin levels rise, and a fourfold rise in titer of these between an acute and convalescent serum in the appropriate clinical setting is considered diagnostic. Complement fixation tests of antibody to *Rickettsia rickettsii* or indirect fluorescent antibody tests are also available, but these levels do not rise until ten to 14 days after the onset of the illness, and therefore rarely yield the needed information in time for the most efficient, productive patient management (*ie*, early antibiotic therapy). Woodward in 1977 reported that a small skin biopsy specimen from a pink macu-

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FIGURE ONE

Factors Commonly Associated with a Fatal Outcome in RMSF

1. Absence of the rash
2. No history of tick exposure
3. Misdiagnosis and subsequent delay in therapy
4. Delay in appropriate therapy past the sixth day of illness

lar portion of the rash can be placed with fluorescent antibodies against spotted fever group rickettsii and then examined by immunofluorescence.³ In this way a positive diagnosis can be made within a few hours. It is interesting to note associated laboratory findings that can occur with RMSF: a normal overall white blood cell count with a striking left shift and a drop in platelets, both of which occurred in the case presented.

The differential diagnoses in a patient with a clinical syndrome of RMSF include measles, meningococcemia, rubella, other rickettsial infections, typhoid, and leptospirosis, although measles and meningococcemia cause the greatest confusion in the differential diagnosis. Physicians should always keep the diagnosis of RMSF in mind when seeing any patient with a compatible clinical history who presents in an endemic area in the months of May through September. The diagnosis may be lifesaving, and therapy should be started as soon as possible with either tetracycline or chloramphenicol.¹

Fatal Characteristics

Death from RMSF has remained a significant problem in the United States, with the total number of deaths continuing to rise since 1958, although the death to case ratio has remained constant. In a 1978 study by Hattwick et al, the authors studied fatal cases of RMSF and characterized the differences of these versus nonfatal cases. Many aspects of the cases were looked at, including; (1) time of onset of the rash; (2) the time during the course of illness when the history of tick bite was obtained; (3) what the initial diagnosis was, and (4) when antibiotic therapy was started. A majority of the nonfatal cases presented with a rash and fever (54%), while only 14% of the fatal cases presented in this fashion. It was also noted that the rash can occur late in the course of the

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disease or may not occur at all, and without suspicion of RMSF, may lead to a delay in therapy and eventual fatality with this disease. As far as time in the illness when the history of tick bite was obtained, the history was much earlier in nonfatal cases. Misdiagnosis is a distinct problem in RMSF and delay in therapy can be dangerous. The majority of nonfatal cases of RMSF had antibiotic therapy started before the sixth day of illness, while 5% of the fatal cases had appropriate antibiotic therapy started prior to the sixth day of illness.¹

In summary, fatal cases tend to be complicated by: (a) misdiagnosis and delay in the therapy past six days, (b) delayed onset of the

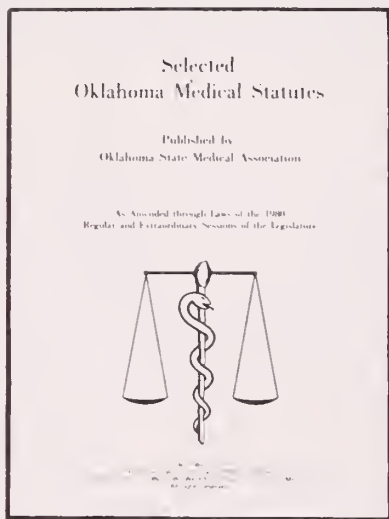
rash or the appearance of an atypical rash leading to misdiagnosis and, (c) a later or no history of tick bite and a delay in therapy.

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Acute Rheumatic Fever at Oklahoma Childrens Memorial Hospital 1975-1980

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A five-year retrospective study of the clinical presentation, diagnosis and treatment of acute rheumatic fever at Oklahoma Childrens Memorial Hospital

Although there are reports that the incidence of rheumatic fever and the prevalence of rheumatic heart disease are declining in Europe and the United States,¹ and that the disease is less severe in its manifestations in the developed countries of the world,¹ acute rheumatic fever has not disappeared as a public health problem. This paper presents a five-year retrospective study of all cases of acute rheumatic fever hospitalized at Oklahoma Childrens Memorial Hospital (OCMH) in Oklahoma City, Oklahoma from 1975 to 1980. The study reflects the population of a primary care facility for a metropolitan area of approximately one-half million people, and a referral institution for the state of Oklahoma. However, the findings are not meant to be indica-

tive of the true incidence of rheumatic fever, or the prevalence of rheumatic heart disease in the state.

Fatal Characteristics

Thirty-one cases were initially reviewed from the records at OCMH. Four cases had rheumatic heart disease with no admissions for acute rheumatic fever. Four cases were excluded for not satisfying the Jones revised criteria. One patient with the admission diagnosis of rheumatic fever was thought on follow-up to have rheumatoid arthritis. Three patients were referred to the outpatient Cardiology Clinic at OCMH and were never hospitalized. One of these patients had hemichorea and subacute carditis, and the other two had nonactive rheumatic carditis and arthritis.

There were 19 patients with 23 admissions for acute rheumatic fever during the five-year period. (Table 1) The ages at the initial attack

Table 1

Admissions for Acute Rheumatic Fever
1975-1980 at OCMH

	White		Nonwhite	
	Male	Female	Male	Female
Ages 5-9 years	1	2	3	0
Ages 10-17 years	5	5	3	0
Initial Attack	5	6	5	0
Recurrences	2	1	4	0

were from 5 to 17 years, with a peak incidence at age 11 years. Fourteen admissions occurred from October to March, and nine admissions from May to July. The peak incidence of new cases was in March. The hospitalization time was from 3 to 30 days. There were no deaths. Three children had relatives with a history of rheumatic fever.

"No single sign or symptom, and no laboratory test, is diagnostic of acute rheumatic fever."

Four of the patients presented with migratory polyarthritis without carditis. Ten had evidence for rheumatic carditis and arthritis, and one had carditis without arthritis. Arthritic signs and symptoms most commonly involved the knees, ankles, and wrists. Four patients presented with chorea, and three of these had carditis. Active carditis was diagnosed when a patient developed definite cardiac enlargement, significant cardiac murmurs, pericarditis (friction rub), or congestive failure. Seventeen patients had murmurs noted on physical exam. Three of these patients had functional murmurs. Of the remaining 14 patients with rheumatic carditis, nine had murmurs of mitral insufficiency alone. Five patients had both mitral insufficiency and aortic insufficiency murmurs. (Table 2) None had aortic insufficiency alone in the acute phase. Apical, mid-diastolic murmurs in patients with mitral valvulitis (Carey-Coombs murmur) were noted in four patients. Chest x-rays revealed cardiac enlargement in four cases with carditis, and signs of congestive failure in three additional cases with carditis. One five-year-old child was admitted twice with congestive failure. A pericardial friction rub was noted in only one patient.

Table 2

Patients with Valvular Involvement
in Acute Rheumatic Fever
seen at OCMH 1975-1980

	Males	Females
Mitral Insufficiency	4	5
Mitral Insufficiency and aortic insufficiency	2	3
Aortic Insufficiency alone	0	0

The four patients with chorea were 6 to 16 years old. Three females and one male presented with complaints of hyperactivity, increasing clumsiness, diplopia, bizarre movements, and behavioral problems. None of the chorea patients had a throat culture positive for group A beta-hemolytic streptococci, and anti-streptolysin o (ASO) titers were elevated in all cases. One patient's EEG showed a slow wave pattern overall with the first episode of chorea, and a repeat EEG done during a recurrence three years later was normal.

Two of the patients with a recurrence of acute rheumatic fever had rashes characteristic of erythema marginatum. No subcutaneous nodules were noted in any of the patients. Fever was present in the majority of the cases. Acute phase reactants (erythrocyte sedimentation rates and C-reactive protein) were elevated in 82% of the cases. Of the 23 admissions for initial or recurrent acute rheumatic fever, only three throat cultures were positive for group A beta-hemolytic streptococci. Five patients with negative throat cultures had prior antibiotic therapy. ASO titers were clearly elevated in 80% of the episodes, and borderline (333 Todd units) in two cases. Over 68% of the patients were anemic. Of these anemic patients, two were black males with sickle cell trait, and one white male had beta thalassemia syndrome. Six patients had prolonged PR intervals on EKG, and all of these patients had evidence of active carditis.

One child had post-streptococcal acute glomerulonephritis (AGN) two months prior to an episode of acute rheumatic fever, and another patient had AGN with a kidney biopsy consistent with post-streptococcal AGN con-

"Arthritis is the most frequent manifestation of rheumatic fever and occurs in approximately 75% of acute cases."

current with the acute rheumatic fever episode.

Treatment

An initial ten-day course of penicillin for the treatment of the streptococcal infection was prescribed. Either a single intramuscular injection of benzathine penicillin G (600,000 to

1.2 million units) or 125 to 250 mg of penicillin four times daily for ten days was given. Anti-inflammatory agents such as salicylates and steroids were used after the disease had clearly manifested itself. Salicylates 100 mg/kg/day were used for arthritis and asymptomatic carditis. Prednisone one mg/kg/day was given for those cases with symptomatic, active carditis. The steroids were administered for two to four weeks; dosages were tapered when the patient showed improvement. Salicylates were given concomitantly during the final week of steroid administration, and continued for six to eight weeks or until the rheumatic activity had subsided.

Outpatient Follow-up

Patients were followed after discharge for one to 62 months. At the present time, two patients have moved out of the state, and four others were lost to follow-up. Sixty-eight per cent received benzathine penicillin G parenterally, and 31% took oral penicillin prophylaxis. Two patients switched at adolescence from intramuscular to oral penicillin. Two cases of recurrent acute rheumatic fever occurring in patients off penicillin prophylaxis, in this study were documented. Of the 14 patients with rheumatic carditis as part of their acute episode, 10 are known to have residual cardiac disease, although this is mild in degree in most instances. One patient with carditis was lost to follow-up. Another patient who had mitral insufficiency with the initial attack developed aortic insufficiency as well with his second episode of acute rheumatic fever.

"Carditis under the age of six years is frequently insidious in its onset and more severe in its manifestations."

Diagnosis and Evaluation

Silberg² *et al* surveyed all Oklahoma hospitals in 1969 and reported a crude incidence rate for acute rheumatic fever of 4.2 per 100,000 population. Non-hospitalized cases

were not included in this study. Age specific incidence rates were 11.3 per 100,000 in the 5- to 9-year age group, and 14.2 per 100,000 in the 10- to 14-year age group. In this present study, six patients were in the 5- to 9-year old age group, and 13 were 10 years of age or older.

No single sign or symptom, and no laboratory test is diagnostic of acute rheumatic fever.³ Acute rheumatic fever follows an upper respiratory infection with group A beta-hemolytic streptococci. This acute pharyngitis is referred to as Phase I of acute rheumatic fever.³ An asymptomatic latent period (Phase

"Anemia occurs commonly in acute rheumatic fever and was present in the majority of patients in this study."

II) following the pharyngitis of one to three weeks is common.³ Six patients in this study gave a history of pharyngitis one to three weeks prior to the onset of acute rheumatic fever (Phase III). The pathogenesis of acute rheumatic fever is not clearly understood.¹ Acute rheumatic fever usually is not associated with skin infections with streptococci,¹ but of interest in this study are the two children who developed post-streptococcal AGN within a close time period of their acute rheumatic fever episodes.

Arthritis is the most frequent manifestation of rheumatic fever³ and occurs in approximately 75% of acute cases.¹ The larger joints — knees, ankles, and wrists — are more commonly involved in rheumatic fever.¹ The frequency of carditis in initial episodes of acute rheumatic fever varies from 40% to 51%.¹ At OCMH, the high frequency of carditis in the cases seen (74%) could possibly be due to the hospital being a referral source for other medical services in the state. Rheumatic arthritis without carditis is most likely being treated by the local physician, with the more severe cases being referred to OCMH. Carditis under the age of 6 years is frequently insidious in its onset and more severe in its manifestations.¹ One of the patients in this study, a 5-year-old Indian male, had severe carditis with his initial episode. The presence of chorea and car-

ditis on initial presentation is uncommon, occurring in 23% to 27% of cases.⁴

It is difficult to evaluate the signs and symptoms of chorea.⁵ Often the behavioral problems that are noted in and after an attack were present before the acute attack.⁶ There is a certain group of patients who have definite neurological involvement after an attack of chorea that is not predictable from the previous history or the severity of the attack.⁶

At the initial presentation, only about 25% of acute rheumatic fever episodes are expected to have positive bacteriologic evidence of a recent streptococcal infection.⁴

With chorea, often all laboratory evidence of a recent streptococcal infection is lacking.⁵ The

elevation of the acute phase reactants is non-specific, and taken only as an indication of an inflammatory process.³ In 75% to 80% of patients with an untreated streptococcal infection, ASO titers will rise one to two weeks after the infection, and be at a peak in three to five weeks.¹ Anemia occurs commonly in acute rheumatic fever,¹ and was present in the majority of the patients in this study. The significance of a prolonged PR interval is controver-

"Recurrent attacks of rheumatic fever are often mimics of the initial episode, especially in those patients without cardiac involvement."

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sial. First degree heart block occurs in 25% to 40% of patients during the acute state of acute rheumatic fever, but is not specific for the disease.¹ The presence of prolonged AV conduction should alert the physician to the possibility of myocardial involvement.^{7, 8}

Initial therapy for all patients is a course of penicillin to eradicate any streptococci present.⁹ Several authors have stressed the importance of withholding salicylates and steroids until the disease is clearly manifest, for the diagnosis of rheumatic fever mandates prophylactic chemotherapy.^{3, 11, 10} The use and dosages of steroids and salicylates are the same as those in this study.

Recurrent attacks of rheumatic fever are often mimics of the initial episode, especially in those patients without cardiac involvement.¹¹ Patients who do not get valvular involvement with the first attack do not seem to get it with a recurrence; however, studies have shown cases where later recurrences produced valvular involvement, or the carditis was missed on the initial episode.¹² Those with valvular involvement during the initial episode may have different noncardiac manifestations during a recurrence, but always have some valvular involvement.¹² Subsequent attacks are dangerous since they may worsen the cardiac valvular disease.¹¹

Without prophylaxis, rheumatic fever will recur in 70% of the patients in a ten-year time

period.⁴ Chorea is more likely than rheumatic arthritis or carditis to recur under non-prophylactic conditions.⁵ The most effective method of prophylaxis in nonallergic patients is parenteral benzathine penicillin G.¹³ There have been fewer recurrences of rheumatic fever, fewer streptococcal infections, and better compliance with this method than with either oral penicillin or sulfadiazine.¹³ Adherence to a prophylaxis program is determined by several factors. Quinn¹⁴ proposes that younger patients are less autonomous in the decision to continue prophylaxis, and therefore more compliant. Also, the younger the patient, the more the need for prophylaxis may be stressed.¹⁴ The prognosis of any child is directly related to the severity of the carditis,⁴ and in these children better compliance may be related to the extra emphasis that is placed on their need for prophylaxis.¹⁴

The cost to the community for the care of rheumatic patients can be only partially estimated from the data available. There will probably be a group of patients who will need further hospitalization for evaluation of their cardiac disease, and perhaps surgery. Rheumatic heart disease is one of the few preventable chronic diseases, and medical effort is presently directed towards prevention in those patients who have had one episode of acute

rheumatic fever. As yet, there is no widely available immunization against streptococci, so the prompt diagnosis by throat culture, and treatment of primary streptococcal pharyngitis are the factors most likely to lessen the incidence of acute rheumatic fever.

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Medicine in China: The Continuing Revolution — Part 1

TERESA THOM

Once a mysterious land seen only by a few outsiders, the People's Republic of China today is eager for exchange with the rest of the world, especially the United States. Newly-established relations between the two countries have opened the way for cooperative efforts in a range of scientific areas, including a broad health agreement that was finalized in 1979.

While it is normal for Westerners to focus on the benefits the Chinese undoubtedly will derive from United States' technical expertise and equipment, it is becoming increasingly evident that China also has something to offer — especially in the medical area. There are a number of health experiments being conducted in China that have important ramifications for the whole world. The Chinese lead the world in microsurgical attachment of limbs, and they have made significant progress in the treatment of burn victims. In the area of cancer research, they have made extremely important discoveries that Westerners would like to know more about. And Frank Press, presidential science advisor for the Carter administration, said in the October 27, 1979, *Science News*: "Their whole health care system will be extremely important for other developing countries and their traditional medicine could make an important contribution to new drug development."

Interchange between academic and practicing American physicians and their counterparts in the People's Republic of China is becoming more in demand as results of Chinese research are published and as physicians who have participated in clinical tours of China encourage their peers to make the trip. By comparing and contrasting the health systems, educational systems and specific diagnostic and treatment issues of the two countries, American physicians can expand their knowledge of differing approaches to health — even though such approaches may not be understood completely.

Last fall, Professional Seminar Consultants, Inc, in cooperation with Peking Medical College and the Chinese Medical Association, organized the Sino-American Gastroenterology Study Tour, a 2½-week clinical study of the People's Republic of China and Hong Kong. Twenty-two American doctors and a nurse — including Oklahoma's William Turner Bynum, MD — participated in the educational tour October 1-19, for which they could earn 50 hours of continuing medical education credit in Category 1 for the Physician's Recognition Award of the American Medical Association (AMA).

The program was designed for the ultimate goal of improved patient care through maximum discussion of clinical issues in differing

cultures. Under the educational leadership of Kurt Isselbacher, MD, Mallinckrodt Professor of Medicine at Harvard Medical School and chief of the Gastrointestinal Unit at Massachusetts General Hospital, the tour group visited medical facilities in Peking, Shanghai, Hangchow, Canton and Hong Kong.

Scientific symposia were held in each of the host cities with presentations by participating American physicians on primary topics, in-

"Under Mao's directive, 'Let the past serve the present,' the Chinese have gone back to re-study their ancient forms such as herbology and acupuncture."

cluding bilirubin, metabolism, malabsorption, intestinal absorption, diarrhea and its pathogenesis, postoperative jaundice, acute and chronic hepatitis and gallstones. Group discussions with Chinese physicians accompanied the lectures, during which information was exchanged and comparisons were made regarding diagnostic procedures and treatments for numerous diseases and illnesses.

Tour participants also had the unique opportunity to visit medical schools, hospitals, clinics and neighborhood centers in a variety of city and village settings. By observing facilities, patients and medical staff at work, the Americans were able to get a general idea of what medical care is like for the average Chinese.

For Bynum, part of the trip was filled with memories of World War II and the days following the surrender of the Japanese. At that time, as chief of medicine and executive officer of the 3rd Marine Division Medical Battalion, he helped reorganize the former Peking Union Medical College, which was the first western-oriented medical school in China. Going back to the school, now called the First Peking Medical College — which still occupies many of the same buildings — was the most striking example, for Bynum, of how drastically medical practices have changed in China since that time.

"When I was there before, Peking Union Medical School was entirely western-oriented medically, and about a block away there was the traditional Chinese medical school,"

Bynum recalled. "But now, the traditional and western medical schools have been combined and each hospital has a traditional medicine division."

Western v. Traditional Medicine

Western medicine was brought to China, introducing the Chinese to medical specialization as we know it, through the substantial influence of the Peking Union Medical College (PUMC), a Rockefeller-funded medical school, which was set up in 1921. Although other American universities maintained excellent teaching and care facilities in China, PUMC was the flagship for Western medicine. There were close affiliations between Chinese and United States medical schools up until 1937, when the Japanese came into China, and during World War II. Western medical practices were taught to the Chinese and a standard of American professionalism was set and held to — although the health care system did little to address the massive health problems of China.

With the advent of "liberation" in 1949, the Communists came to power and Chairman Mao Tse-tung organized the new People's Republic of China's health policy based on four principles: put prevention first in health work; serve the workers and peasants and stress the rural areas; integrate health work with political activities; and unite traditional Chinese and western medicine, especially in the area of herbal and modern drugs.

Under Mao's directive, "Let the past serve the present," the Chinese have gone back to restudy their ancient forms such as herbology and acupuncture. Traditional medicine dates

"The traditional doctors sit side by side with the modern doctors to render medical services and discuss medical problems."

back thousands of years in Chinese history. Acupuncture may have been used for more than 5,000 years, and approximately 2,000 years ago, the Chinese summarized their medical knowledge in a medical classic called *Nei-ching*. Valuable observations were recorded in

this 18-volume work, although it was not written very scientifically according to current standards. Medicine has been organized in China more than 2,000 years, with nutritionists, internists, trauma specialists and veterinarians being trained in organized programs before the birth of Christ. And many of the principles first advanced centuries ago now have been confirmed by modern science. It has become evident that traditional Chinese medicine cannot be disregarded.

Beginning in 1958, practicing physicians

"Once the peasant began asking for personal, convenient medical care, Mao had one of his principal justifications for the Great Proletarian Cultural Revolution."

were required to take short courses in traditional medicine. Now, traditional and western medicine are being combined in the Chinese health care system. The traditional doctors sit side by side with the modern doctors to render medical services and discuss medical problems. National policy requires all students in schools of western medicine to spend 30 percent of their time studying traditional Chinese medicine, including its basic theories — pharmacutics, acupuncture and moxibustion. There is considerable enthusiasm at the present time for developing a more scientific traditional Chinese medicine. Scientific research in herbal medicine has been conducted by the government since the 1949 change of power.

Joseph C. Lee, MD, PhD, who was born, raised and educated in the People's Republic of China and now is living in Oklahoma City, said that by law patients must be diagnosed and treated by the use of both Chinese traditional and western medicine.

"Mao initiated it and his followers now in the government still follow that rule," Lee said. "They think that Chinese medicine is good, even though they know that western medicine — in many aspects — is superior to Chinese traditional medicine. They still want their

physicians to try to explore traditional treatment first."

Prior to 1976 and the end of the 10-year Great Proletarian Cultural Revolution, Chinese physicians had to apply Chinese traditional medical practices to every diagnosis. However, after 1977, this rule was relaxed — even though the law supposedly still is in effect. Lee said that when taking a patient's history the physician will begin with the Chinese medical approaches, and follow with western approaches.

"However, when they're actually treating the patients — when they're in the operating room — everything is western medicine," Lee stressed. "They might use acupuncture anesthesia according to the rule, but at the same time, they also will give an anesthetic — either by gas or by injection."

Bynum said that a chief medical officer in Shanghai told him that the patients who were sent to the Chinese medicine division were primarily those who had failed to respond to the standard western medications or who chose to go directly to the traditional Chinese physicians. This physician estimated that approximately 25 percent of the patients in the hospital were treated by both western and traditional physicians.

Medical Education and Services

What the Chinese are doing and trying to do in medical education and health care today can be understood only in terms of the population distribution in China and the consequences of the Cultural Revolution.

The People's Republic of China, the third largest country in the world, is vast, covering more than 3.7 million square miles. The huge, ever-changing landscape dominates the people. The cities are densely populated, the 12,500-mile borderland is sparsely settled and the rest of the country is so vast that though it holds hundreds of millions of China's 1.2 billion people, large parts of it appear virtually empty.

After 1949, vaccination, boiled water, and elimination of insects and parasites, produced within a decade, a new public understanding of health. This was especially true in the rural areas, where plague, pestilence, starvation, flood, war and serfdom had not allowed the peasant to expect any more. The Chinese peasant was the original supporter of Communism

— he was the soldier in Mao's army. Once the peasant began asking for personal, convenient medical care, Mao had one of his principal justifications for the Great Proletarian Cultural Revolution.

From the beginning of the People's Republic of China, Mao's declared policy, in terms of medicine, had been stated clearly. But by 1964, the peasant still was obtaining medical care from a Chinese traditional doctor or not at all. Graduates of medical schools were staying in the cities and becoming specialists in big hospitals, and the traditional doctors often remained in the larger villages, attending only the more prosperous farmers for an excessive fee.

In the field of medical education and care, therefore, the conflict between Mao Tse-tung and the administrative head of the government who had replaced him, Liu Shao-ch'i, was sharply defined. By 1964, Mao — who had stepped down from the administration, accepting the role of esteemed leader so that he was free to think and write — had lost effective control over the party's working structure and was no longer able to make the system respond to his wishes.

Charging the members of the superstructure with exploiting the working class for capitalistic gains, Mao — with the help of editorial writers, especially in Shanghai — began hammering at his own party and, by instigating the Chinese youths, launched his Great Proletarian Revolution in mid-1966 and essentially was able to close down the party, purge it and rebuild it. His primary goal was for the proletariat to take power for themselves and, in the process, create a new culture free of domination by the feudal and bourgeois heritage. Mao's message was summarized in three words — "Serve the people."

"Mao's message was summarized in three words — 'Serve the people.'"

Medicine, one of the large social units of any society, was a primary target of the ten-year Cultural Revolution. Every medical, pharmacy, dental and nursing school was closed, and all students in school were declared

graduated and sent to the countryside to practice indefinitely. Gradually, some of the primary and secondary schools began to reopen, but the universities and medical schools did not reopen until the fall of 1970, and their enrollments were much smaller than before.

Perhaps more than any other group, the western-trained doctors felt the revolution's hand of coercion. From 1949 to 1966 they had worked hard at preparing scientifically trained doctors — specialists, practicing at international standards. The big city hospitals were equal to any in the world. But most of the Chinese people were not in the big cities and were not likely to be served by these special skills. China is not composed of big cities, and big-city medicine is not useful to a land-tied peasant.

Serving the people now meant that medical care had to be produced in the countryside.

"Perhaps more than any other group, the western-trained doctors felt the revolution's hand of coercion."

Programs were initiated at once to fulfill that need. Cooperative medical services developed in the countryside, and a health care person was created to help fill the dramatic need for more medical personnel. These "barefoot doctors," as they are called, are working peasants with three months of training as a first-aid worker.

"These barefoot doctors are equivalent to our paramedics and they are not well trained," Lee said. "They can treat only minor maladies — a headache, a stomach ache — something like that. If a person requires surgery or is seriously ill, he still must be sent to a hospital in a big town or city."

However, because of the system of barefoot doctors — there are more than 1.5 million of them in China today — one now can obtain medical care within a parameter of a few miles. Every city suburb, commune and factory has these workers, operating out of conveniently located clinics.

The instigators of the Cultural Revolution charged that too many physicians, university teachers and scientists were not sympathetic to the unmet health needs of the majority of the

Chinese people. Therefore, once the universities and medical schools reopened in December 1970, students were deliberately selected from workers, soldiers and peasants, with the children of workers and peasants getting first priority. Students then had to be recommended by a revolutionary committee or the army, or by the people of the factory or commune in which the individual or individual's parents worked, and they had to be approved for "correct political thought." Mao said that the medical program had become "the Ministry of Health of City Dwellers," and that "the expression of 'Ministry of Health' becomes gibberish if it leaves 350 million peasants aside." Medicine and medical education had to be controlled by the people, not by an academic framework as we know it, and the entrance to higher education had to be earned by proof of one's thorough study of Communism, not by grades, academic achievement or accreditation.

The medical education program before the Cultural Revolution was said to have been repetitive and scholastic and cruel to the students. Chairman Mao said the program had to be shortened and made of more "essence," and therefore the curriculum was shorted to three years and traditional medicine was combined with modern medicine.

Upon graduation, each student had to return to the unit which initially forwarded him or her as a student — the army, factory, business or commune. That way, the distribution of physicians would be based upon the need of the original source and thus, the people would be served.

Since students were not chosen on the basis of intelligence or scholastic background during the Cultural Revolution, Lee said that most of the graduates of medical schools during that time are "very poor physicians."

Modern Renaissance Under Way

But with the end of the Cultural Revolution, Chinese medicine — like all of science — is undergoing a renaissance stimulated by a new government campaign to modernize the country by the year 2000.

By 1977 or 1978, medical schools began administering entrance examinations, so that candidates would be admitted according to ex-

amination scores — although Lee did say that from 1977-79 the children of farmers and workers still enjoyed priority, even though their scores were lower. However, since 1979, admittance into medical school has depended solely on the individual's academic achievements and score in the entrance examination. And every level of schooling in China is free, including textbooks and meals.

The curriculum for all but two of China's 109 medical schools has been expanded to five years, with the first year being dedicated to premedical classes. The two medical school exceptions are the Shanghai Institute for Medical Sciences and the Peking Institute for Medical Sciences, which have eight-year curricula. Lee said that these two universities are the only medical schools in China that are comparable to those we have in the United States.

Medical school graduates are no longer obligated to return to their factory or commune,

"China is changing rapidly, and after a decade of turmoil, Mao's strict ideology has been up-ended."

but the government, as their employer, does assign where they will practice, according to need.

Students who were graduated during the Cultural Revolution — many of whom weren't competent — have been either recalled to go through the five-year curriculum or simply are not allowed to practice.

There are some very positive results that the Cultural Revolution's redirection of medicine produced. Preventative medicine takes precedence in China today, and the Chinese have depended to a large degree on the barefoot doctors to carry out public health campaigns. Successful efforts have resulted in the virtual elimination of venereal disease. Poor hygiene habits continually are being combatted, and there has been a dramatic reduction in the number of disease-carrying pests, such as rats and flies. Perhaps the most crucial public health campaign currently under way is a push to control population, since the large family and house-bound woman are no longer desirable in a country bound for modernization,

whose economic structure is such that each woman, like each man, must be employed. China is intent on reducing the annual birth rate to a growth of less than 1%.

Accounts of the remarkable medical experiment in China, published widely in the West, stimulated thoughtful reconsideration of health policy in the rest of the world. The barefoot doctor became a symbol for reduction efforts elsewhere and so intrigued Third World representatives that the World Health Organization (WHO) changed its focus from providing leadership for disease-fighting, health-promoting 20th-century scientific standards to recommending "appropriate technology." With the establishment of the Traditional Medicine Program, WHO began pointing to other cultures as sources of effective folk healing, encouraging non-Western ways of maintaining health and curing disease.

China is changing rapidly, and after a decade of turmoil, Mao's strict ideology has been upended. Class struggle is no longer the principal contradiction in Chinese society, as ideology has been replaced by economic incentives to get the people moving. The Chinese are on a "New Long March" — modernization of agriculture, the military, science and industry — and the direction and ramifications of the changes will depend on the ways the Chinese people tap all that remains positive in their revolution.

Next issue, we'll examine attitudes towards differing approaches to health in the United States and the People's Republic of China.

Theresa Thom, an Oklahoma City freelance writer, was graduated from the University of Oklahoma, receiving a bachelor of arts degree in journalism. her articles have been published statewide. She was publicity director for Oklahoma City's Lyric Theatre in 1980 and is currently public relations director for an Oklahoma City advertising agency.

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News From The Oklahoma State Department of Health

The Oklahoma State Department of Health has begun preparations for a program to study veterans who may have been exposed to certain defoliants or herbicides, including the Vietnam-era herbicide, agent orange.

The project is a result of the Agent Orange Act passed by the Oklahoma Legislature this year to provide assistance to veterans who may have suffered ill effects from exposure to herbicides while serving in the armed forces.

Long-term human health effects of herbicide exposure, including agents such as agent orange, are poorly documented. The act provides that the state health department take the leadership in a program of information gathering and education awareness in an effort to determine if there is a causal link between health problems and herbicide exposure.

The act provides that, upon veteran request, health care providers may provide data to the state health department about any veteran suspected of having been exposed to agent orange. The department will evaluate this information and make it available for public distribution. The department will also cooperate

with other medical and administrative facilities in developing a referral program for veterans to file claims for medical and financial aid, and initiate an education program for health professionals about agent orange.

A seven-member agent orange committee, three of whom must have been associated with the Vietnam conflict, has been appointed by Commissioner of Health Joan K. Leavitt, MD. The committee is charged with advising her on the development of an outreach program to identify and inform veterans of the possible detrimental effects of exposure to agent orange-type agents. The committee will also recommend to the commissioner procedures for the design and implementation of an epidemiological study related to agent orange exposures. □

COMMUNICABLE DISEASES IN OKLAHOMA FOR MAY, 1982

DISEASE	MAY 1982	MAY 1981	APRIL 1982	TOTAL TO DATE	
				1982	1981
Amebiasis	1	2	2	6	4
Aseptic Meningitis	4	19	8	22	31
Brucellosis	1	1	1	3	2
Encephalitis, Infectious	3	4	2	10	14
Gonorrhea (Use Form ODH-228)	1200	1297	1240	6334	6121
Hepatitis A	91	29	71	287	121
Hepatitis B	38	28	30	120	98
Hepatitis Unspecified	36	7	18	114	67
Malaria	3	1	-	3	3
Measles (Rubeola)	-	-	-	-	5
Meningococcal Infections	4	4	1	13	26
Pertussis	-	-	-	2	1
Rabies (Animal)	26	34	29	104	96
Rocky Mountain Spotted Fever	16	36	3	19	41
Rubella	-	-	1	2	-
Salmonellosis	25	39	22	82	125
Shigellosis	15	39	15	112	96
Syphilis (Use Form ODH-228)	15	9	19	80	79
Tetanus	-	1	-	-	1
Tuberculosis	39	31	28	158	125
Tularemia	2	6	1	4	8
Typhoid Fever	-	-	-	3	4

Council Aims to Draw Students and Survey Public's Attitudes

The OSMA Council on Professional and Public Relations is initiating two major projects designed to improve communication and feedback between the association and two target groups — medical students and the public at large. The first project involves a series of roundtable discussions between medical students and practicing physicians; the second involves a statewide public opinion poll conducted in cooperation with the American Medical Association.

The student program is designed not only to establish better lines of communications between OSMA and medical students but also to generate student interest in becoming active members of the association.

OSMA is working with faculty and students at the University of Oklahoma to set up a series of six roundtable discussions for the upcoming school year. Discussion subjects were suggested by students and include the organization and functions of hospital staff and physicians, the business aspects of opening a medical practice, the role of physicians in influencing legislative activities, and the benefits of membership in the AMA, OSMA, and county medical societies. The two remaining subjects will be determined later.

The program will be aimed primarily at first-year medical students, though it may be opened to interested second-year students, too. Discussion leaders will come from the ranks of physician members and staff of OSMA. The roundtables will be conducted over lunch at the Faculty House on the Health Sciences Center campus. Faculty liaison for the program is Wilson D. Steen, PhD, head of the Department of Community Medicine.

The second project, the public opinion poll, will be undertaken in conjunction with the AMA's nationwide opinion poll. An expanded subset of Oklahomans will be polled on behalf of OSMA to determine their attitudes about and perceptions of the medical profession and key health care issues.

Results of the survey will be used in a number of ways to define the profession's image problems and serve as a framework for developing image-enhancement programs; to formulate strategies aimed at countering negative public attitudes toward organized medicine and reinforcing positive ones; to pro-

vide feedback to OSMA members concerning the public's view of the physician-patient relationship; to predict public reaction to association positions on public policy and legislation; and, finally, to provide a concrete means for measuring changes in public opinion on important health care issues.

Some of the areas to be included in the survey are: satisfaction with the doctor-patient relationship; responsibility for the rising costs of medical care; response to new practice forms; attitude toward physician advertising; justification for professional liability suits; and personal responsibility for maintaining good health.

The poll is being conducted by the public opinion research firm of Kane, Parsons & Associates. Results are expected to be available by late fall. □

Delegation Tends to Business at 1982 AMA Annual Meeting

Oklahoma's delegates and alternates to the American Medical Association 1982 Annual Meeting maintained a busy schedule of delegate meetings, reference committee hearings, and private caucuses as the conclave of physicians from across the nation proposed, debated, and voted on policies and issues affecting organized medicine.

The annual meeting took place June 13-17 in downtown Chicago.

Actions taken by the AMA House of Delegates included: endorsement of a plan to develop a set of national health priorities; approval to move ahead with plans to provide hospital medical staffs a voice in the house; adoption of the second step in an incremental approach to dues increases; endorsement of a campaign to limit the authority of the Federal Trade Commission; and endorsement of tougher licensing procedures for graduates of

medical schools outside the United States and Canada.

The health priorities plan was the subject of lengthy and vigorous debate, sparked by a resolution introduced by the Oklahoma and Kansas delegations. The resolution was intended to assure the delegates' prerogative to approve AMA policies and actions and to preclude possible preemptive moves by the AMA Board of Trustees. Though the resolution was defeated, the point it made was well taken.

The Oklahoma delegation succeeded in passing another resolution, this one dealing with the use of precise terminology. The resolution directs the AMA to use precise language when discussing socioeconomic matters of concern to medicine and to avoid the use of terms such as *health care*, *health care costs*, and *health care providers* when other, more specific terms would clarify the issues being addressed.

Another section of the resolution, submitted by the Nebraska delegation, discourages the use of terms that may be misleading or confusing in AMA news releases, testimony, and publications.

Representing Oklahoma at the annual meeting were delegates Ed L. Calhoon, MD; M. Joe Crosthwait, MD; Perry A. Lambird, MD; and Harlan Thomas, MD; and alternates J.B. Eskridge, III, MD; William M. Leebron, MD; Victor L. Robards, Jr., MD; and Orange M. Welborn, MD. OSMA officers in attendance included John A. McIntyre, MD, president; George H. Kamp, MD, president-elect; James B. Pitts, MD, immediate past president; and Armond H. Start, MD, secretary-treasurer. □

High Court Says Physicians Liable for Warning Patients

The Oklahoma Supreme Court has ruled that a manufacturer of an intrauterine contraceptive device is required to warn only the prescribing physician, not the ultimate consumer, of the product's possible hazards.

The ruling upheld a lower court decision to remove an IUD manufacturer as a defendant in a Kay County lawsuit.

The suit was filed by a couple in 1977 against a Ponca City physician and Ortho Pharmaceutical Corporation, manufacturer of the Lippes Loop. According to court records,

when the woman underwent a hysterectomy, doctors discovered that the IUD inserted five years before had perforated her uterus and moved to another part of her body, necessitating surgical removal. The discovery was made after the woman had undergone a pregnancy, a miscarriage, and a tubal ligation.

The woman claimed she had received no warning about possible perforation from either the physician who inserted the IUD or the nurse who counseled her before the insertion. The couple sued the physician, alleging negligence, and sued Ortho, alleging defective design and failure to warn the patient of possible hazards. The manufacturer claimed its duty to warn of such hazards was fulfilled through a warning to physicians placed on the package containing the IUD.

The high court ruled that once the physician is warned, the responsibility for explaining the risk lies with the physician. □

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OSMA Aids Summer Program to Benefit Abused Children

The Oklahoma State Medical Association is joining other community service organizations in sponsoring the "83 Summer Fun in the Sun" program being conducted by Oklahoma Prevention of Child Abuse (OPCA). The program enables abused and neglected youngsters to enjoy the swimming pool and nautical playground at the White Water family water theme park.

Oklahoma Prevention of Child Abuse conducts programs throughout the year to benefit abused children. In April OSMA participated as a sponsor of the organization's annual children's Easter Party.

OPCA was founded in 1979 in response to the alarming increase in the number of reported incidents of child abuse and neglect. Its goal is to prevent child abuse through education in parenting skills. □

HSC Library Opens Exhibit of OSMA Medical Artifacts

The University of Oklahoma Health Sciences Center Library has opened the exhibit of medical instruments and historical documents donated by OSMA to the library's History of Medicine collection. The medical artifacts exhibit is located on the third floor of the library next to the reading lounge.

The library is soliciting additional materials for the OSMA exhibit that reflect the early days of organized medicine in Oklahoma. Contributions of instruments, medical books, account books, photographs, letters, and certificates are welcomed. All donated items will be acknowledged, catalogued, and carefully prepared for display.

Physicians or physicians' families wishing to donate materials or funds to the medical exhibit should contact Anita Delaporte at OSMA headquarters, (405) 843-9571, or Lee Pedersen, head of library reference services, at (405) 271-2670. □

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Symposium on Substance Abuse to Feature Dr Robert DuPont

Robert L. DuPont, MD, nationally recognized expert on the abuse of alcohol and other drugs, will be the featured speaker at the "Symposium on Alcohol and Drug Abuse" set for September 28, 3-5 pm, at St Lukes Methodist Church in Oklahoma City.



The symposium is intended to present factual and scientific information concerning the epidemic of substance abuse among teenagers and children. The program is designed to aid educators, counselors, physicians, legislators, parents, and other concerned adults in identifying and helping youngsters with drug problems.

Dr DuPont, a practicing psychiatrist in the Washington, DC area, is a frequent contributor to local and national television, radio, newspapers, and magazines on a variety of health and behavioral topics. He is a regular guest on ABC-TV's "Good Morning, America."

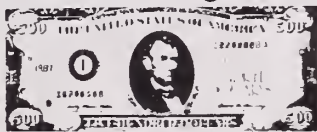
Dr DuPont has considerable professional

experience in the area of drug abuse prevention and treatment. From 1973 to 1978, he served as director of the National Institute on Drug Abuse, where he was responsible for guiding the federal government's major drug abuse treatment, research, and prevention efforts. From 1973 to 1975 he directed the White House Special Action Office for Drug Abuse Prevention. He now serves as president of the not-for-profit Institute for Behavior and Health, Inc.

Dr DuPont holds the faculty positions of clinical professor of psychiatry at the Georgetown University Medical School and visiting associate clinical professor of psychiatry at the Harvard Medical School. He is a diplomat of the American Board of Psychiatry and Neurology and a fellow of the American Psychiatric Association.

Sponsors of the drug abuse symposium include the Oklahoma City Clinical Society, the Oklahoma County Medical Society Community Foundation and Auxiliary, the Oklahoma State Medical Association, and the Mental Health Association in Oklahoma County. Information on the symposium may be obtained by calling the Oklahoma County Medical Society at (405) 843-9619. □

Fabulous Money Machine?



If you owned a machine that printed a brand new \$500 bill each week, you'd be most fortunate wouldn't you? But, what if this very special machine had parts that could not be replaced? As a prudent person in control of such a machine you would want some assurance that if the machine stopped producing \$500 bills, you could still receive them, wouldn't you?

Physicians are high-achieving professional breadwinners and can be compared to "money machines" But, they are also human beings, who because of their profession, have a greater than average understanding of the prospects of unexpected accidents and illnesses which can impair or destroy their income producing ability.

Through the Oklahoma State Medical Association Group Disability Program, you have the opportunity to obtain assurance of uninterrupted income if your health should fail.

Three plans are available. Plan L-65 pays accident benefits for lifetime. Sickness benefits are payable to age 65, or for a 2-year maximum period if disability begins between ages 63 and 70. Benefits are payable for 10 years based on being unable to perform every duty of your occupation, thereafter, based on being unable to perform the duties of any gainful occupation for which you are reasonably fitted

Semi Annual Premium — Benefit payable after 8 days for sickness, first day for accidents.

Plan L-65	WEEKLY INDEMNITY	UNDER AGE 30	AGE 30-39	AGE 40-49	AGE 50-59	AGE 60-69
	\$500.00	\$301.50	\$346.50	\$476.50	\$641.50	\$418.50*
	400.00	241.50	277.50	381.50	513.50	418.50*
	300.00	181.50	208.50	286.50	385.50	418.50
	200.00	121.50	139.50	191.50	257.50	279.50
	100.00	61.50	70.50	96.50	129.50	140.50

For full particulars, contact JANE GRIFFITH

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A NOTE OF THANKS TO ALL

The President and Board of Regents of the University of Oklahoma have confirmed the promotion of:

Patrick D. Barnes, MD

to Associate Professor of Radiological Sciences in the College of Medicine.

- OUHSC College of Medicine Graduate, 1973
- OUHSC Diagnostic Radiology Residency, 1977
- Harvard University and Boston CHMC
Pediatric Neuroradiology and Cardiovascular
Radiology Fellowship, 1977
- American Board of Radiology, 1977
- Society for Pediatric Radiology, 1979.
- Staff Pediatric Radiologist OCMH, 1977-1982
- Section Chief, Pediatric Radiologic Special Procedures,
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Department of Radiology
Oklahoma Children's Memorial Hospital

Post Office Box 26307
Oklahoma City, OK 73126
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In Memoriam

1981

<i>Mark R. Everett, PhD</i>	<i>August 17</i>
<i>Khalil Ahmad, MD</i>	<i>August 22</i>
<i>M. H. Haskell, MD</i>	<i>August 30</i>
<i>C. F. Foster, Jr., MD</i>	<i>October 11</i>
<i>E. E. Shircliff, MD</i>	<i>October 23</i>
<i>S. N. Stone, Jr., MD</i>	<i>November 9</i>
<i>James R. Barnes, MD</i>	<i>December 13</i>
<i>E. Rankin Denny, MD</i>	<i>December 16</i>
<i>John P. Grimes, MD</i>	<i>December 24</i>

1982

<i>Frances P. Newlin, MD</i>	<i>February 16</i>
<i>James T. Maddox, MD</i>	<i>February 21</i>
<i>Joseph F. Messenbaugh, MD</i>	<i>March 12</i>
<i>Boyd Vance Lucas, MD</i>	<i>April 9</i>
<i>Carlton E. Smith, MD</i>	<i>April 23</i>
<i>Ella H. Murray, MD</i>	<i>May 3</i>
<i>Loyd G. Williams, MD</i>	<i>May 15</i>



New Genetics Clinic Program Aids in Diagnosis of Diseases

A statewide Genetics Outreach Clinic Program for Oklahoma has been established under the auspices of the Maternal and Child Health Services of the State Department of Health. Designed as an auxiliary diagnostic tool for local primary physicians, the program is aimed at determining the hereditary nature of certain diseases and defects and counseling families to reduce the transmission of such conditions.

The program is conducted by MD geneticists and genetic counselors at referral centers in Tulsa and Oklahoma City and by trained nurse practitioners at satellite centers in rural areas. Outreach clinics are held once a month in the satellite centers, where patients and families are seen free of charge by the geneticist and staff.

Once patients have been examined and evaluated and laboratory tests have been completed, the primary physicians are notified regarding diagnosis and recommendations for treatment. Diagnosis is aided by use of the Birth Defects Information System computer, available at the Tulsa center.

The familial component of disease is gaining increased recognition within the medical profession. It is estimated that 15 million Americans suffer the consequences of birth defects, and that 80 percent of these individuals are affected by malfunctioning genes or altered chromosomes.

A genetic condition should be suspected in patients exhibiting low birth weight, failure to thrive, dysmorphic features, hypotonia, developmental delay, mental retardation, seizures, chronic kidney or heart trouble, premature dementia, blindness, deafness, or repeated miscarriage or neonatal death. Inquiries and referrals may be made to the referral centers or the outreach clinics listed below:

Tulsa Referral Center: Burhan Say, MD, Children's Medical Center, (918) 664-6600, ext. 501

Claremore Outreach Clinic: Gwen Liebl, RN, Rogers County Department of Health, (918) 341-3166

Muskogee Outreach Clinic: Verba Wilson, RN, Muskogee County Department of Health, (918) 683-0321

Oklahoma City Referral Center: Owen M. Rennert, MD, Oklahoma Children's Memorial Hospital, (405) 271-4401

Enid Outreach Clinic: Garfield County Health Department (405) 233-0650

Lawton Outreach Clinic: Comanche County Health Department (405) 248-5890

Clinton Outreach Clinic: Norma Harder, RN, Custer County Health Department, (405) 323-2100 □

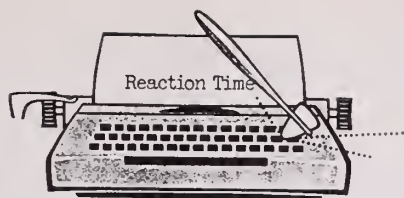
MEDICAL-LEGAL SEMINARS

1982 SCHEDULE

August 5	Medical Office Management	Ardmore
August 17	Medical Office Management	Bartlesville
August 19	Medical Office Management	Tulsa
August 26	Medical Office Management	Lawton
August 31	Medical Office Management	Muskogee
September 29	Medical Record Law	Oklahoma City

For registration information write:
Ed Kelsay
% Medical-Legal Seminars
5131 Classen Blvd., Suite 212
Oklahoma City, OK 73118





June 21, 1982

Dr. Mark Johnson, M.D.
Editor-in-Chief, *The Journal*
Oklahoma State Medical Association
601 N.W. Expressway
Okla. City, Okla. 73118

Dear Dr. Johnson,

As a physician and parent, I am in complete support of your position expressed in the March, 1982, *OSMA Journal*, entitled, "Right Weapon-Wrong Target." It saddens me to read comments to the contrary, especially when they have threatening overtones.

We are all victims of the tremendous costs in terms of money, lost man hours and misery, sustained as a result of alcoholism. Over the years, I have been at the scenes of numerous automobile accidents involving drinking and death. The horror and shock of viewing mangled bodies of all ages is something about which I have never and will never become accustomed. Moreover, I wonder how many of your readers have had similar experiences and what their feelings have been? My own mother and father were nearly killed this past Christmas by a drinking driver. I finally began to see why there is such a need for getting the alcoholic into treatment and that, if necessary, we as physicians, should use our political clout to do so. As a matter-of-fact, a great many in the lay community have been quite vocal about this very thing, witness the recent passage of legislation in our state mandating stiffer penalties for the intoxicated driver.

I think it's one thing to "cry" about the damage a cigarette smoker does to his or her own health and to pontificate with statistics in comparing cigarettes to alcohol; it's quite another to ignore and deny the obvious danger to us as physicians from the alcoholic, be he a patient, colleague, driver, or family member. Time is pressing and it is urgent for us in the medical community to recognize that al-

coholism is a deadly disease and that many suffering from its scourge are in great personal pain and anguish. This does not even begin to reflect countless others who have had great personal misfortune as a consequence of the alcoholics' behavior.

I'm hoping the journal will publish some educational articles on alcoholism and drug addiction. It would be good to see more recognition of this disease to supplement the meager number of hours of instruction on alcoholism that most of us received in medical school. If just one physician, patient, or reader benefits, your efforts to have reached out will have validated.

Thank you, again, for having the courage to express your convictions. In state and national medical publications, there is a need for more editors like yourself.

Sincerely yours,

BILL CROWELL, M.D.
Chickasha, Okla.

Cancer Symposium to Examine Role of Primary Physician

The Oklahoma Division of the American Cancer Society will present an oncology symposium on "The Role of the Primary Care Physician in Cancer Treatment" on August 14 at the Williams Plaza Hotel in Tulsa.

The purpose of the symposium is to acquaint the primary care physician with the current status of cancer diagnosis and treatment and the management of clinical problems associated with cancer therapy.

The program will cover diagnostic and therapeutic approaches to head and neck cancer; capabilities and side effects of radiation therapy; administration of chemotherapy; nutritional needs of the oncology patient; principles and methods of pain management; and follow-up care for the patient after hospital discharge.

The symposium is being presented in conjunction with the Office of Continuing Medical Education, University of Oklahoma Tulsa Medical College. For registration information contact Paul McDaniel, American Cancer Society, 1312 NW 24th Street, Oklahoma City, Oklahoma 73106, (405) 525-3515. □

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Ex-Officio Member:

Mark R. Johnson, MD, Oklahoma City,
Editor-in-Chief, The Journal ☐

Book Reviews

Principles of Family Medicine. Robert E. Rakel. Philadelphia: W. B. Saunders Co., 1977. 536 pages. Price \$14.75.

This book, in essence, provides an overview of the development and present status of the family medicine concept. Basic principles and measures of patient care and family medicine are emphasized. These are amply supported by selected references, illustrative graphs and tables. A useful innovation is provision of reasons for including certain references. Stress is placed on the broad aspects of family and patient care. The book is well-organized, has clear and easy style and is quite readable. The chapters entitled "The Medical Record", "Family Charting", and "The Family Profile" are unnecessarily detailed.

This book can be recommended for its stated purpose. *Harris D. Riley, Jr., MD*

The Liver: Normal and Abnormal Functions (in two parts) Part A & Part B. Edited by Frederick F. Becker, New York: Marcel Dekker, Inc. 1978, 572 pages (Part A) and 575-1018 (Part B), Price \$37.50.

The first volume (Part A) in this two-part series is divided into the following sections: Functional Morphology, Endocrine Functions, Exocrine Functions, and Regulatory Functions. It contains a total of 15 chapters, with several sub-sections in each chapter, prepared by several different investigators. The chapters are written in substantial detail and cover current knowledge about that aspect of the liver, its functions and its diseases. Each of the major sections starts out with metabolic or other functional relationships of the liver, followed by the hepatic abnormalities which occur in various disorders. The description of each aspect is quite detailed and up-to-date.

Part B, the second of two parts, contains some ten chapters. As in Part A, each is a monograph covering most of what is known about that particular subject. The first two deal with hepatitis B antigen and hepatitis. The former, by Prince, is an extremely detailed review which is well-written and superbly

documented. It is highly useful to one seeking a review or simply keeping up with this fast-moving field. Unfortunately, the author does not cover the confusing and controversial field of sub-types of hepatitis antigen.

The chapter on worms by K. S. Warren is an excellent review of this problem. The chapter on cirrhosis, although brief, is excellent and is well-written. Other chapters deal with hepatic failure, obstructive jaundice in infancy, childhood cirrhosis, and a final section on transplantation of the liver.

Overall, both volumes are well-done and useful. They combine new authors with a commendable editorial policy to emphasize that which is new and helpful and to review that from the old which helps one understand the new directions. It is an excellent reference. *Harris D. Riley, Jr., MD*

Anaerobic Bacteria in Human Disease. Sidney Finegold. New York: Academic Press Incorporated, 1977. 710 pages. \$49.50.

Finegold's encyclopedic book on anaerobic bacteria and infections is a welcome addition. A comprehensive review of the subject as well as the literature concerning infections caused by anaerobic bacteria is very timely and this volume certainly provides such. It moreover furnishes a compendium of material about anaerobic organisms as they occur in the human body. The author presents information that makes quite clear the polymicrobial nature of anaerobic infections.

The book contains 21 chapters with a single bibliography for all at the end of the book. Not included is an author index reference to bibliography numbers which would increase the book's reference value. The subject index is complete. Chapter 1 deals with definitions of anaerobes, classification, and other basic information. Chapter 2 provides descriptions of clinical and microbiologic recommendations towards anaerobic infections, collection and transport methods, and review of current culture techniques. Chapter 3 is brief but deals with the incidence and significance of anaerobic isolations. Chapters 4-15 deal in detail with anaerobic infections of specific sys-

tems and anatomic sites. Another chapter deals briefly with miscellaneous anaerobic infections, such as fusospiroketosis and infections of the scrotum, buttock, groin, and breast. Another chapter is devoted entirely to intoxications covering botulism, clostridial infections, tetanus, and *C. perfringens* food poisoning.

Chapter 18 deals with antimicrobial susceptibility testing of anaerobic organisms and includes a great deal of unpublished material from the author's extensive work. There are also chapters on therapy and prognosis and prophylaxis.

The book is well written. The style is clear and direct. It is an excellent reference source, its only major drawback being its relatively high cost. *Harris D. Riley, Jr., MD* □

The Laboratory in Clinical Medicine, edited by J. A. Halstead, 866 pages. Philadelphia: W. B. Saunders Company, 1976. \$32.50.

The publication of this book marks the reappearance of an old standby. *The Laboratory in Clinical Medicine* is the successor to the well-known *Clinical Pathology* by Benjamin B. Wells. Like most subsequent editions of text-books, the book has grown in size and now has contributions from fourteen authors. However, it is still an excellent one. It extends beyond being a supplemental interpretation of laboratory data, and includes consideration of the whole spectrum of diagnostic procedures, including cardiac catheterization, echocardiography, and others. It will be particularly helpful to students, but will retain wide appeal. *Harris D. Riley, Jr., MD* □

Miscellaneous Advertisements

GENERAL SURGEON, BOARD CERTIFIED, 34, broadly trained all fields, desires position near Tulsa or Oklahoma City. Partnership or group preferred. Completing military obligation and available June, 1983. Reply Key H, The Journal, Oklahoma State Medical Association, 601 NW Expressway, Oklahoma City, OK 73118, for CV and details.

MD, FAMILY PRACTICE, MINOR EMERGENCY CLINIC in South Oklahoma City is now accepting applications. No night call., competitive salary with profit sharing. Paid malpractice, BC/BS. Please call Linda at (405) 631-3636 for appointment with Medical Director.

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ONE FOR ALL – One tablet treats pinworm
in any patient, regardless of age or body weight.*
Obviates need to calculate individual dosages.

A single tablet eradicates pinworm in 95% of patients.

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VERMOX[®] CHEWABLE TABLETS
(mebendazole)



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The #1 anthelmintic for pinworms and many other worm infestations

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(mebendazole)

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Vermox
Tabs #4
Sig 1 tab
each family
member



DESCRIPTION VERMOX (mebendazole) is methyl 5-benzoylbenzimidazole-2-carbamate.

ACTIONS VERMOX exerts its anthelmintic effect by blocking glucose uptake by the susceptible helminths, thereby depleting the energy level until it becomes inadequate for survival. In man, approximately 2% of administered mebendazole is excreted in urine as unchanged drug or a primary metabolite. Following administration of 100 mg of mebendazole twice daily for three consecutive days, plasma levels of mebendazole and its primary metabolite, the 2-amine, never exceeded 0.03 µg/ml and 0.09 µg/ml, respectively.

INDICATIONS VERMOX is indicated for the treatment of *Trichuris trichiura* (whipworm), *Enterobius vermicularis* (pinworm), *Ascaris lumbricoides* (common roundworm), *Ancylostoma duodenale* (common hookworm), *Necator americanus* (American hookworm) in single or mixed infections. Efficacy varies as a function of such factors as pre-existing diarrhea and gastrointestinal transit time, degree of infection and helminth strains. Efficacy rates derived from various studies are shown in the table below:

	Whipworm	Common Roundworm	Hookworm	Pinworm
cure rates				
mean	68%	98%	96%	95%
(range)	(61-75%)	(91-100%)	—	(90-100%)
egg reduction				
mean	93%	99.7%	99.9%	—
(range)	(70-99%)	(99.5%-100%)	—	—

CONTRAINDICATIONS VERMOX is contraindicated in pregnant women (see Pregnancy Precautions) and in persons who have shown hypersensitivity to the drug.

PRECAUTIONS PREGNANCY: VERMOX has shown embryotoxic and teratogenic activity in pregnant rats at single oral doses as low as 10 mg/kg. Since VERMOX may have a risk of producing fetal damage if administered during pregnancy, it is contraindicated in pregnant women.

PEDIATRIC USE: The drug has not been extensively studied in children under two years; therefore, in the treatment of children under two years the relative benefit/risk should be considered.

ADVERSE REACTIONS Transient symptoms of abdominal pain and diarrhea have occurred in cases of massive infection and expulsion of worms.

DOSAGE AND ADMINISTRATION The same dosage schedule applies to children and adults. The tablet may be chewed, swallowed or crushed and mixed with food. For the control of pinworm (enterobiasis), a single tablet is administered orally, one time. For the control of common roundworm (ascariasis), whipworm (trichuriasis), and hookworm infection, one tablet of VERMOX is administered, orally, morning and evening, on three consecutive days. If the patient is not cured three weeks after treatment, a second course of treatment is advised. No special procedures, such as fasting or purging, are required.

HOW SUPPLIED VERMOX is available as chewable tablets, each containing 100 mg of mebendazole, and is supplied in boxes of twelve tablets. VERMOX (mebendazole) is an original product of Janssen Pharmaceutica, Belgium.

US Patent 3,657,267
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because so much remains to be done.

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September 16-17, 1982

Sheraton Inn

Fort Smith, Arkansas

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Outstanding specialists will discuss: Testicular Cancer, Managing the Side Effects of Chemotherapy, Subclavian Catheter Technique, Tumor Markers, Unproven Methods of Cancer Treatment, Body Image Changes, Hospice, It's Care of the Cancer Patient, The Family with Cancer, Administration of Chemotherapy, Primary Treatment of Breast Cancer with Radiotherapy and Case Presentations.

Programs, advance registration cards and hotel reservations may be obtained from the Arkansas/Oklahoma Divisions of the American Cancer Society, 1312 N. W. 24th Street, Oklahoma City 73106.

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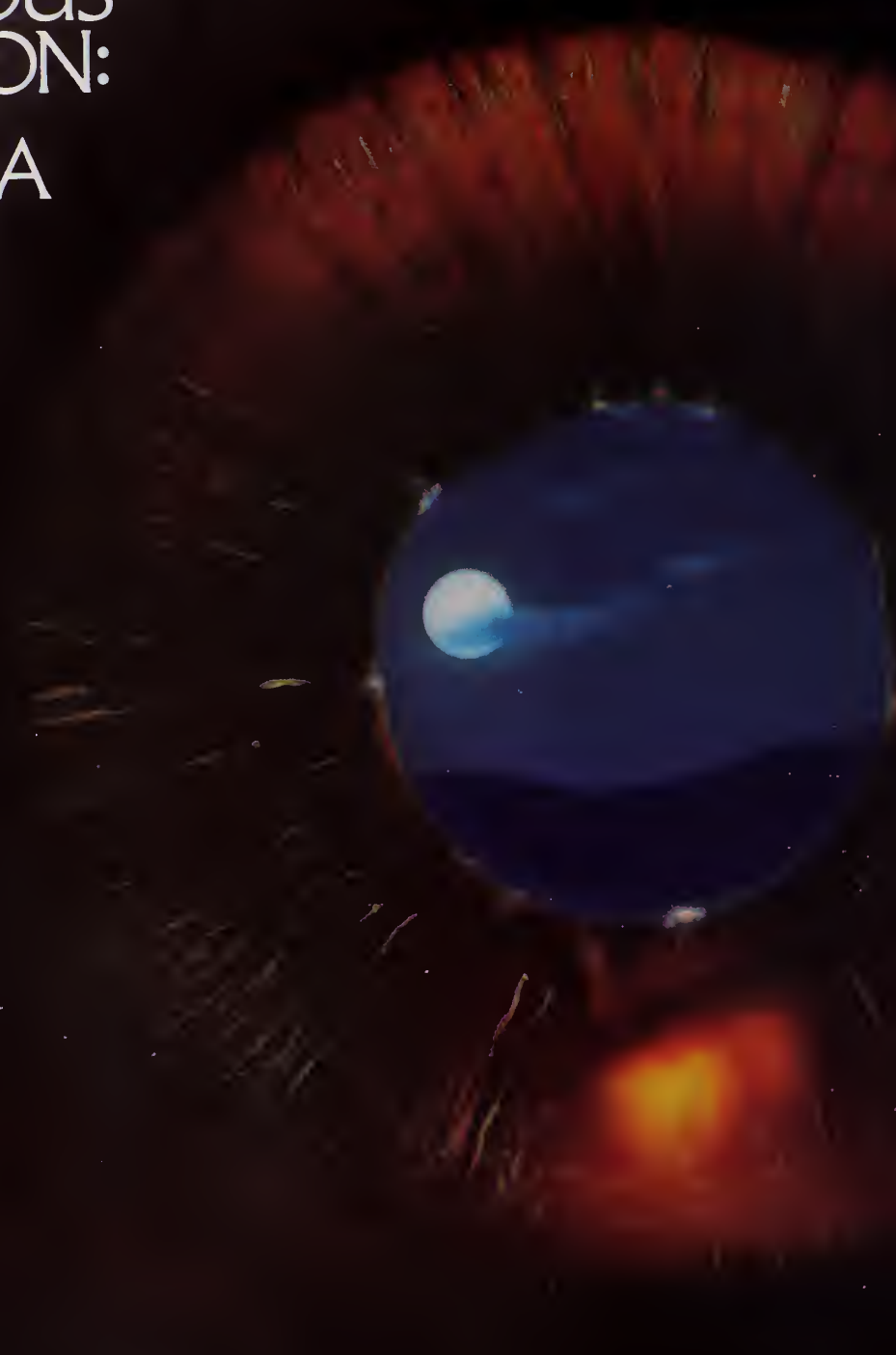
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agitation
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feelings of guilt
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fatigue
palpitations
headache
vague aches
and pains
sadness
psychic and
somatic anxiety

Artist's conception,
looking out from the human eye
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LIMBITROL GIVEN H.S.: ONE OF THE VITAL SPECIFICS OF TREATMENT

Limbitrol brings a special—and specific—quality of relief to most anxious depressed patients. Insomnia, for example, responds with particular promptness. Other symptoms likely to respond within the first week of treatment include anorexia, agitation and psychic and somatic anxiety. And, as the depression and anxiety are alleviated, in many cases so are such related somatic symptoms as headache, palpitations, and various vague aches and pains.

**Limbitrol given once daily h.s.
may be the best approach**

Many patients respond readily to a single bedtime dose of Limbitrol, a convenient schedule that may enhance compliance and helps relieve the insomnia associated with anxious depression. Limbitrol also offers a choice of other regimens: t.i.d., or a divided dose with the larger portion h.s. In all cases, caution patients about the combined effects with alcohol or other CNS depressants and about activities requiring complete mental alertness, such as driving or operating machinery.

in moderate depression and anxiety

Limbitrol® IV

Tablets 5-12.5 each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline
(as the hydrochloride salt)

Tablets 10-25 each containing 10 mg chlordiazepoxide and 25 mg amitriptyline
(as the hydrochloride salt)

Specific therapy with h.s. dosage convenience

Please see summary of complete product information on following page.

LIMBITROL® TABLETS Tranquilizer—Antidepressant

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of moderate to severe depression associated with moderate to severe anxiety

Contraindications: Known hypersensitivity to benzodiazepines or tricyclic antidepressants. Do not use with monoamine oxidase (MAO) inhibitors or within 14 days following discontinuation of MAO inhibitors since hyperpyretic crises, severe convulsions and deaths have occurred with concomitant use, then initiate cautiously, gradually increasing dosage until optimal response is achieved. Contraindicated during acute recovery phase following myocardial infarction

Warnings: Use with great care in patients with history of urinary retention or angle-closure glaucoma. Severe constipation may occur in patients taking tricyclic antidepressants and anticholinergic-type drugs. Closely supervise cardiovascular patients (Arrhythmias, sinus tachycardia and prolongation of conduction time reported with use of tricyclic antidepressants, especially high doses. Myocardial infarction and stroke reported with use of this class of drugs.) Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving)

Usage in Pregnancy: Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies.

Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Since physical and psychological dependence to chlordiazepoxide have been reported rarely, use caution in administering Limbitrol to addiction-prone individuals or those who might increase dosage, withdrawal symptoms following discontinuation of either component alone have been reported (nausea, headache and malaise for amitriptyline, symptoms [including convulsions] similar to those of barbiturate withdrawal for chlordiazepoxide)

Precautions: Use with caution in patients with a history of seizures, in hyperthyroid patients or those on thyroid medication, and in patients with impaired renal or hepatic function. Because of the possibility of suicide in depressed patients, do not permit easy access to large quantities in these patients. Periodic liver function tests and blood counts are recommended during prolonged treatment. Amitriptyline component may block action of guanethidine or similar antihypertensives. Concomitant use with other psychotropic drugs has not been evaluated. Sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precautions about pregnancy. Limbitrol should not be taken during the nursing period. Not recommended in children under 12. In the elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects.

Adverse Reactions: Most frequently reported are those associated with either component alone: drowsiness, dry mouth, constipation, blurred vision, dizziness and bloating. Less frequently occurring reactions include vivid dreams, impotence, tremor, confusion and nasal congestion. Many depressive symptoms including anorexia, fatigue, weakness, restlessness and lethargy have been reported as side effects of both Limbitrol and amitriptyline. Granulocytopenia, jaundice and hepatic dysfunction have been observed rarely.

The following list includes adverse reactions not reported with Limbitrol but requiring consideration because they have been reported with one or both components or closely related drugs.

Cardiovascular: Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke

Psychiatric: Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania and increased or decreased libido

Neurologic: Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns

Anticholinergic: Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract

Allergic: Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus

Hematologic: Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia

Gastrointestinal: Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue

Endocrine: Testicular swelling and gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female and elevation and lowering of blood sugar levels

Other: Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling

Overdosage: Immediately hospitalize patient suspected of having taken an overdose. Treatment is symptomatic and supportive. IV administration of 1 to 3 mg physostigmine salicylate has been reported to reverse the symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment.

Dosage: Individualize according to symptom severity and patient response. Reduce to smallest effective dosage when satisfactory response is obtained. Larger portion of daily dose may be taken at bedtime. Single *h.s.* dose may suffice for some patients. Lower dosages are recommended for the elderly. Limbitrol 10-25, initial dosage at three to four tablets daily in divided doses, increased to six tablets or decreased to two tablets daily as required. Limbitrol 5-12.5, initial dosage of three to four tablets daily in divided doses, for patients who do not tolerate higher doses.

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The Physician's Sleep Glossary

Some common sleep laboratory terms

poly-som-no-graph. An instrument which simultaneously records by electrodes physiological variables during sleep—for example, brain activity (EEG), eye movements (EOG), muscle tone (EMG) and other electrophysiological variables. These readings indicate precisely when patients fall asleep, how many wake periods they experience, the quality of sleep and the duration of sleep.

sleep la-ten-cy. The period of time measured from "lights out," or bedtime, to the commencement or onset of sleep.

wake time af-ter sleep on-set. Intervals of time spent awake between onset of sleep and the end of the sleep period. The polysomnograph registers the length and frequency of the intervals.

to-tal sleep time. The amount of time actually spent in sleeping. This is estimated by subtracting wake times from the period encompassed by the onset and the termination of sleep.¹

REM/NREM. 1. REM, or rapid eye movement, sleep is "active"—characterized by increased metabolic rates, elevated temperature and arousal-type EEG patterns. 2. NREM, or non-rapid eye movement, sleep represents "quiet" sleep stages. There are four distinct stages of NREM sleep.²

re-bound in-som-nia. A statistically significant worsening of sleep compared to baseline on the nights immediately following discontinuation of sleep medication.³

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Contraindications: Known hypersensitivity to flurazepam HCl; pregnancy. Benzodiazepines may cause fetal damage when administered during pregnancy. Several studies suggest an increased risk of congenital malformations associated with benzodiazepine use during the first trimester. Warn patients of the potential risks to the fetus should the possibility of becoming pregnant exist while receiving flurazepam. Instruct patient to discontinue drug prior to becoming pregnant. Consider the possibility of pregnancy prior to instituting therapy.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. An additive effect may occur if alcohol is consumed the day following use for nighttime sedation. This potential may exist for several days following discontinuation. Caution against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Potential impairment of performance of such activities may occur the day following ingestion. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, abrupt discontinuation should be avoided with gradual tapering of dosage for those patients on medication for a prolonged period of time. Use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, light-headedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase; and paradoxical reactions, e.g., excitement, stimulation and hyperactivity.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg recommended initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.



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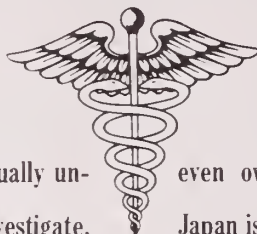
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Brief Summary.

Consult the package literature for prescribing information.
Indications and Usage: Cefclor® (cefclor, Lilly) is indicated in the treatment of the following infections when caused by susceptible strains of the designated microorganisms:

Lower respiratory infections, including pneumonia caused by *Streptococcus pneumoniae* (*Diplococcus pneumoniae*), *Haemophilus influenzae*, and *S. pyogenes* (group A beta-hemolytic streptococci).

Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Cefclor.

Contraindication: Cefclor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics.

Warnings: IN PENICILLIN-SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY. THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS. AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS, INCLUDING ANAPHYLAXIS, TO BOTH DRUG CLASSES.

Antibiotics, including Cefclor, should be administered cautiously to any patient who has demonstrated some form of allergy, particularly to drugs.

Precautions: If an allergic reaction to cefclor occurs, the drug should be discontinued, and, if necessary, the patient should be treated with appropriate agents, e.g., pressor amines, antihistamines, or corticosteroids.

Prolonged use of cefclor may result in the overgrowth of nonsusceptible organisms. Careful observation of the patient is essential. If superinfection occurs during therapy, appropriate measures should be taken.

Positive direct Coombs tests have been reported during treatment with the cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coombs testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs test may be due to the drug.

Cefclor should be administered with caution in the presence of markedly impaired renal function. Under such a condition, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended.

As a result of administration of Cefclor, a false-positive reaction for glucose in the urine may occur. This has been observed with Benedict's and Fehling's solutions and also with Clinistix® tablets but not with Tes-Tape® (Glucose Enzymatic Test Strip, USP, Lilly).

Usage in Pregnancy: Although no teratogenic or antifertility effects were seen in reproduction studies in mice and rats receiving up to 12 times the maximum human dose or in ferrets given three times the maximum human dose, the safety of this drug for use in human pregnancy has not been established. The benefits of the drug in pregnant women should be weighed against a possible risk to the fetus.

Usage in Infancy: Safety of this product for use in infants less than one month of age has not been established.

Adverse Reactions: Adverse effects considered related to cefclor therapy are uncommon and are listed below.

Gastrointestinal symptoms occur in about 2.5 percent of patients and include diarrhea (1 in 70) and nausea and vomiting (1 in 90).

As with other broad-spectrum antibiotics, colitis, including rare instances of pseudomembranous colitis, has been reported in conjunction with therapy with Cefclor.

Hypersensitivity reactions have been reported in about 1.5

Some ampicillin-resistant strains of *Haemophilus influenzae*—a recognized complication of bacterial bronchitis*—are sensitive to treatment with Cefclor.¹⁻⁶

In clinical trials, patients with bacterial bronchitis due to susceptible strains of *Streptococcus pneumoniae*, *H. influenzae*, *S. pyogenes* (group A beta-hemolytic streptococci), or multiple organisms achieved a satisfactory clinical response with Cefclor.⁷

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Pulvules®, 250 and 500 mg

percent of patients and include morbilliform eruptions (1 in 100). Pruritus, urticaria, and positive Coombs tests each occur in less than 1 in 200 patients. Cases of serum-sickness-like reactions (erythema multiforme or the above skin manifestations accompanied by arthritis/arthritis and, frequently, fever) have been reported. These reactions are apparently due to hypersensitivity and have usually occurred during or following a second course of therapy with Cefclor® (cefclor). Such reactions have been reported more frequently in children than in adults. Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.

Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.

Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients).

Causal Relationship Uncertain: Transitory abnormalities in clinical laboratory test results have been reported. Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician.

Hepatic: Slight elevations in SGOT, SGPT, or alkaline phosphatase values (1 in 40).

Hematopoietic: Transient fluctuations in leukocyte count, predominantly lymphocytosis occurring in infants and young children (1 in 40).

Renal: Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200).

*Many authorities attribute acute infectious exacerbation of chronic bronchitis to either *S. pneumoniae* or *H. influenzae*.

Note: Cefclor is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

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All advertising copy must be approved by the Editorial Board before acceptance for publication. General and miscellaneous advertising rates will be sent on request.

EDITING SERVICE

The Editorial Board reserves the prerogative to submit contributions to a Medical Editing Service when warranted. If such is felt necessary, the Editor will contact the author for approval, informing him that there will be a modest charge for this service.

REPRINTS

Authors will receive reprint order forms from the Transcript Press, P.O. Drawer 1058, Norman, Oklahoma 73070, prior to final publication of their articles. Other requests for reprints must be made to the Transcript Press within 30 days after publication.

BACK ISSUES

Microfilm copies of back issues of *The Journal* may now be purchased from University Microfilms International, 300 North Zeeb Road, Ann Arbor, Michigan 48106.

The Sickle Cell Anemia Research Foundation, Inc., an affiliate of the National Association for Sickle Cell Disease, will undertake a statewide awareness campaign and screening program in September to mark National Sickle Cell Month. With the assistance of the Oklahoma State Department of Health, the foundation will conduct sickle cell testing at sixty county health departments, in addition to regular testing sites, during the week of September 12-18. The foundation also plans to conduct testing and educational programs at high schools in Oklahoma City and Tulsa and on college campuses around the state.

Two Oklahoma physicians have been selected for fellowship in the American College of Radiology (ACR) in honor of their special contributions to the medical profession. David C. Lowry, MD, of Oklahoma City, and Walter H. Gary, MD, of Tulsa, will receive their fellowship awards at the ACR annual meeting in September. The ACR is an 18,000-member professional medical society representing physicians who specialize in the use of radiation and ultrasound to diagnose and treat diseases.

The American College of Physicians (ACP) has elected Dala R. Jarolim, MD, of Tulsa, to fellowship in the 54,000-member national specialty society. Dr Jarolim, a specialist in oncology, will be honored during the convocation ceremony at the ACP's annual meeting in April, 1983. The ACP elects to fellowship physicians recognized for their achievements in medical scholarship and internal medicine.

Robert G. Tompkins, MD, medical director of Tulsa's St Francis Hospital, has been awarded membership in the American College of Physi-

cian Executives (ACPE) in recognition of his proficiency in both the practice of medicine and the management of health care organizations. He is one of the first physicians in the country to be awarded membership. The ACPE recognizes as members only those physicians who demonstrate exceptional clinical skills and superior management capabilities.

Jack A. Barney, MD, of Oklahoma City, has been elected secretary-treasurer of the Southwestern Surgical Congress. Jay P. Cannon, MD, of Oklahoma City, was appointed state councillor of Oklahoma. Appointed as vice-councillors for the state were Frank A. Clinigan, MD, of Tulsa; William C. McCurdy, III, MD, of Norman; and Harris J. Moreland, MD, of Bartlesville.

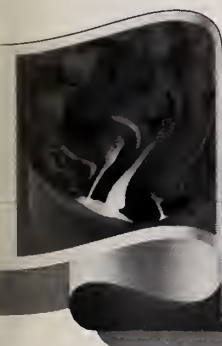
CHAMPUS will now share the cost of electric-powered cart-type vehicles for CHAMPUS beneficiaries. Coverage for these vehicles is retroactive to October 1, 1980. To qualify for cost sharing, the beneficiary's physician must determine that a standard, nonelectric wheelchair will not meet the beneficiary's medical needs; that an electric-powered cart-type vehicle best meets the beneficiary's needs; and that the beneficiary can operate the vehicle safely.

Two new publications to help nurses and social workers evaluate and analyze patient care are available from the Joint Commission on Accreditation of Hospitals (JCAH). The publications, *Nursing Review* and *Social Work Review*, are special editions of the JCAH's *Quality Review Bulletin*. Each contains fifteen articles dealing with approaches, methods, criteria, standards, and studies relating to quality assurance activities in nursing and social work. □

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For acute otitis media in children due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over other antimicrobials. To date, there are limited data on the safety of repeated use of Bactrim in children under two years of age. Bactrim is not indicated for prophylactic or prolonged administration in otitis media et any age.

For acute exacerbations of chronic bronchitis in adults due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over a single antimicrobial agent.

For enteritis due to susceptible strains of *Shigella flexneri* and *Shigella sonnei* when antibacterial therapy is indicated.

Also for the treatment of documented *Pneumocystis carinii* pneumonitis.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; patients with documented megaloblastic anemia due to folate deficiency; pregnancy at term; nursing mothers because sulfonamides are excreted in human milk and may cause kernicterus; infants less than 2 months of age.

Warnings: **BACTRIM SHOULD NOT BE USED TO TREAT STREPTOCOCCAL PHARYNGITIS.** Clinical studies show that patients with group A β hemolytic streptococcal tonsillopharyngitis have higher incidence of bacteriologic failure when treated with Bactrim than do those treated with penicillin. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.

Precautions: **General:** Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function. Bactrim may prolong prothrombin time in those receiving warfarin; reassess coagulation time when administering Bactrim to these patients.

Pregnancy: Teratogenic Effects: Pregnancy Category C. Because trimethoprim and sulfamethoxazole may interfere with folic acid metabolism, use during pregnancy only if potential benefits justify the potential risk to the fetus.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. **Blood dyscrasias:** Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. **Allergic reactions:** Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. **Gastrointestinal reactions:** Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea, pseudo-membranous colitis and pancreatitis. **CNS reactions:** Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. **Miscellaneous reactions:** Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for infants less than two months of age.

URINARY TRACT INFECTIONS AND SHIGELLOSIS IN ADULTS AND CHILDREN, AND ACUTE OTITIS MEDIA IN CHILDREN

Adults: Usual adult dosage for urinary tract infections—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days. Use identical daily dosage for 5 days for shigellosis.

Children: Recommended dosage for children with urinary tract infections or acute otitis media—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. Use identical daily dosage for 5 days for shigellosis.

For patients with renal impairment: Use recommended dosage regimen when creatinine clearance is above 30 ml/min. If creatinine clearance is between 15 and 30 ml/min, use one-half the usual regimen. Bactrim is not recommended if creatinine clearance is below 15 ml/min.

ACUTE EXACERBATIONS OF CHRONIC BRONCHITIS IN ADULTS.

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1. Rubin RH, Swartz MN. *N Engl J Med* 303:426-432, Aug 21, 1980 2. Data on file. Medical Department, Hoffmann-La Roche Inc.

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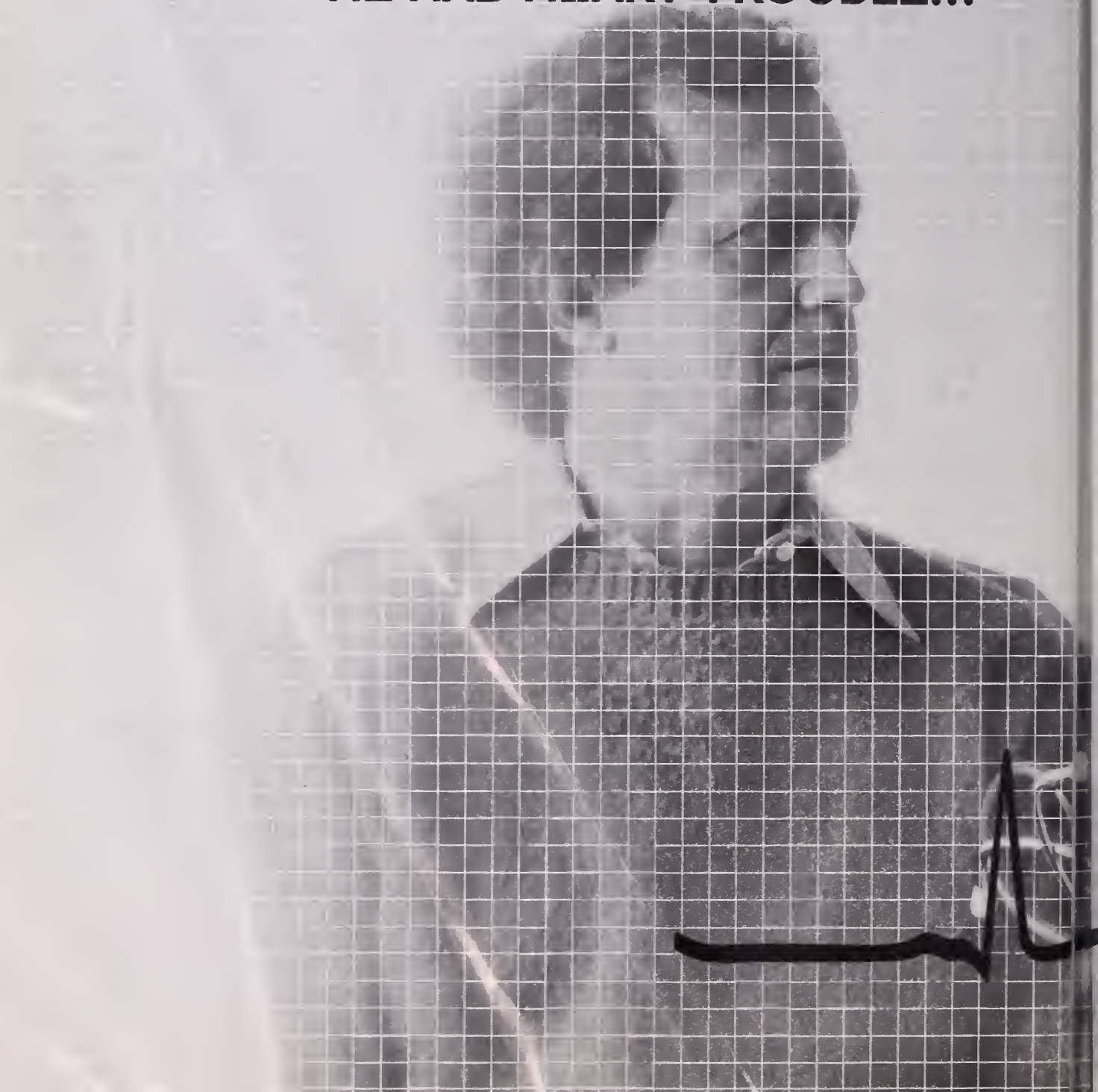
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JOURNAL

Oklahoma State Medical Association



**THE PATIENT THINKS
HE HAS HEART TROUBLE...**





...YOU KNOW IT'S REALLY ANXIETY SYMPTOMS

His presenting symptoms: palpitations, chest pain, chronic exhaustion and occasional difficulties in breathing. Good reason for concern. A complete workup uncovers no organic dysfunction, but it *does* reveal excessively high levels of anxiety and apprehension.

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At times like this, Valium (diazepam/Roche) can be a potent therapeutic ally. It works promptly. Within just a few hours, the patient begins to feel calmer. And in a few days, anxiety relief not only becomes more pronounced but a noticeable reduction in anxiety-generated somatic symptoms also occurs.

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diazepam/Roche

2-mg, 5-mg, 10-mg scored tablets

BECAUSE YOU'RE CONVINCED
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Before prescribing, please consult complete product information, a summary of which follows:

Indications: Management of anxiety disorders, or short-term relief of symptoms of anxiety. Anxiety or tension associated with the stress of everyday life usually does not require treatment with an anxiolytic. Symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal, adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy). The effectiveness of Valium (diazepam/Roche) in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma, may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication, abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms similar to those with barbiturates and alcohol have been observed with abrupt discontinuation, usually limited to extended use and excessive doses. Infrequently, milder withdrawal symptoms have been reported following abrupt discontinuation of benzodiazepines after continuous use, generally at higher therapeutic levels, for at least several months. After extended therapy, gradually taper dosage. Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation. The clearance of Valium and certain other benzodiazepines can be delayed in association with Tagamet (cimetidine) administration. The clinical significance of this is unclear.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported, should these occur, discontinue drug. Isolated reports of neutropenia, jaundice, periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. **Adults:** Anxiety disorders, symptoms of anxiety: 2 to 10 mg b.i.d. to q.i.d., alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed, adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d., adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. **Geriatric or debilitated patients:** 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) **Children:** 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

How Supplied: For oral administration, Valium scored tablets—2 mg, white; 5 mg, yellow; 10 mg, blue—bottles of 100* and 500; * Prescription Packs of 50, available in trays of 10; † Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25; ‡ and in boxes containing 10 strips of 10 †.

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SEPTEMBER, 1982

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CONTRAINDICATIONS

1) bronchial asthma, 2) allergic rhinitis during the pollen season, 3) sinus bradycardia and greater than first degree block, 4) cardiogenic shock, 5) right ventricular failure secondary to pulmonary hypertension, 6) congestive heart failure (see WARNINGS) unless it is secondary to a tachyarrhythmia treatable with propranolol, 7) in patients on adrenergic-augmenting psychotropic drugs (including MAO inhibitors), and during the two week withdrawal period from such drugs.

WARNINGS

CARDIAC FAILURE. In congestive heart failure, inhibition with beta-blockade carries the potential hazard of further depressing myocardial contractility and precipitating cardiac failure. In patients already receiving digitalis, propranolol may reduce the positive inotropic action of digitalis and may have an additive depressant effect on AV conduction.

IN PATIENTS WITHOUT A HISTORY OF CARDIAC FAILURE, in rare instances, cardiac failure has developed during propranolol therapy. At the first sign of impending cardiac failure, patients should be fully digitalized and/or given a diuretic, and observed closely a) if cardiac failure continues, despite adequate digitalization and diuretic therapy, propranolol should be immediately withdrawn, b) if tachyarrhythmia is being controlled, patients should be maintained on combined therapy and closely followed until threat of cardiac failure is over.

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following abrupt discontinuation of Inderal therapy. Therefore, when discontinuance of Inderal is planned the dosage should be gradually reduced and the patient carefully monitored. In addition, when Inderal is prescribed for angina pectoris, the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If Inderal therapy is interrupted and exacerbation of angina occurs, it is usually advisable to reinstitute Inderal therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease, who are given propranolol for other indications.

IN PATIENTS WITH THYROTOXICOSIS, possible deleterious effects from long term use have not been adequately appraised. Give special consideration to propranolol's potential for aggravating congestive heart failure. Propranolol may mask the clinical signs of developing or continuing hyperthyroidism or complications and give a false impression of improvement. Propranolol should be withdrawn slowly, since abrupt withdrawal may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

IN PATIENTS UNDERGOING MAJOR SURGERY, beta-blockade impairs the ability of the heart to respond to reflex stimuli. Except in pheochromocytoma, propranolol should be withdrawn 48 hours prior to surgery. In case of emergency surgery, the effects of propranolol can be reversed by administration of beta-receptor agonists such as isoproterenol or levaterenol, but such patients may be subject to protracted severe hypotension. Difficulty in restarting and maintaining the heart beat has been reported.

IN PATIENTS PRONE TO NONALLERGIC BRONCHOSPASM (e.g., CHRONIC BRONCHITIS, EMPHYSEMA), administer with caution, since propranolol may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta-receptors.

DIABETICS AND PATIENTS SUBJECT TO HYPOGLYCEMIA. Propranolol may prevent the appearance of premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia, especially in patients with labile diabetes. A precipitous elevation of blood pressure may accompany hypoglycemic attacks.

USE IN PREGNANCY. Safe use in human pregnancy not established. Embryotoxic effects have been seen in animals at doses about 10 times the maximum recommended human dose.

PRECAUTIONS

Patients receiving catecholamine depleting drugs such as reserpine should be closely observed if propranolol is administered, since it may occasionally produce hypotension and/or marked bradycardia resulting in vertigo, syncopal attacks, or orthostatic hypotension.

Observe laboratory parameters at regular intervals. Use with caution in patients with impaired renal or hepatic function.

ADVERSE REACTIONS

Cardiovascular: bradycardia, congestive heart failure, intensification of AV block, hypotension, paresthesia of hands, arterial insufficiency, usually of the Raynaud type, thrombocytopenic purpura. **Central Nervous System:** lightheadedness, mental depression manifested by insomnia, lassitude, weakness, fatigue, reversible mental depression progressing to catatonia, visual disturbances, hallucinations, an acute reversible syndrome characterized by disorientation for time and place, short term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics. **Gastrointestinal:** nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis. **Allergic:** pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress. **Respiratory:** bronchospasm. **Hematologic:** agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura. **Miscellaneous:** reversible alopecia. Oculocutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta-blocker (practolol) have not been conclusively associated with propranolol. **Clinical Laboratory Test Findings:** Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

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Reference: 1 Freis, E. D. Hypertension (Suppl. II) 3:230 (Nov-Dec) 1981.

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Trojan Horse Revisited

Remember the legend of the Trojan Horse — a tale of deceit and destruction?

It has been adapted to contemporary problems thousands of times over. Pardon me, but here it comes again — this time in the form of an analagous assault on the OSMA's hallmark professional liability insurance program.

A major insurance carrier which once served state physicians well, then abandoned some 300 of our colleagues in 1976, when the malpractice going got rough, is now rolling up a gift horse called "*Claims Made*" insurance — a hollow shell of a malpractice insurance policy which is vastly inferior to the product sold by our own Physicians Liability Insurance Company.

"*Claims Made*" features an invitingly low first-year premium, followed by quantum-jump price increases over the following four years, and concluding with the biggest of all insults when you try to get free from it; you have to buy your way out or your protection evapo-

rates. (See Doctor Brown's article in the News Section)

OSMA members have been blessed with the finest of malpractice insurance situations in the land for 30 years or so. Now we have our own PLICO — which not only offers a quality policy at premium costs among the nation's lowest, but also gives us the comfort of knowing that we will always be treated fairly.

PLICO is us!

The PLICO policy is simple, straightforward and bountiful in its coverage provisions. Our competitor's is deceptive in its design, woefully short on coverage, diseconomical in the long run, and most difficult for the average doctor to understand unless he's fluent in Greek.

We've stood strong against the plaintiff's bar for all these many years because our membership has been melded into a united, common cause where malpractice attacks are concerned. If this fortress of unity and strength is breeched, our professional liability future will be at best weakened and at worst destroyed.

Let's keep our gates closed to *this* Trojan Horse.

The impaired physician has been a concern of the Oklahoma State Medical Association for many years, and during the past several years a committee responsible to the Board of Trustees has been in operation for the care of these physicians.



Many of the state medical societies across the nation, as well as the American Medical Association, have committees devoted to this purpose. The number of physicians who are impaired has been variously estimated to be from 10 to 14% of the society memberships, although some investigators insist that the number is far greater than this. Included in those impaired are those with alcohol and drug abuse, psychiatric and emotional problems, and those disabled with age, senility, and physical disability. Chemical abuse (alcohol and drugs) constitutes the great majority of the physicians involved. This problem is not unique to physicians, but an effort to provide personal and professional care by their own professional organization on a voluntary basis, with complete confidentiality, is the approach characteristic of our state medical association.

An effective program for care of the impaired physician as an individual requires identification, verification, confrontation, treatment and rehabilitation. All of these actions are fraught with difficulties and problems. Identification is difficult, since the individual himself may not realize the extent of his problem, and his peers, family and close associates are often reluctant to jeopardize their relationship with the patient by divulging the problem to someone else. These factors contribute greatly to the difficulty of confrontation, and the necessity for the patient to admit to his peers and family that his problem is out of control. Once these two

actions have been accomplished, the institution of treatment and care can be easily set in motion, and continued over the necessary period of time to reach rehabilitation and return to practice. Education of all our members regarding the many facets of this program is vital, and will increase its effectiveness many times. It is important for us all to realize that this problem is distinct from that of incompetency, which is the province of the Grievance Committee of the state medical association, and in fact is largely dealt with by hospital staffs and the State Board of Medical Examiners.

The committee believes that the medical profession and the members of this association, have a fundamental obligation to care for their colleagues, and that we must attempt in every possible way to help them. Certainly we cannot condone impaired behavior, nor should we go around the block to avoid contact with a sick doctor. We are not proposing that anyone "blow the whistle" on another physician. Rather, we are proposing that we perform as caring, concerned physicians for the problems of a fellow human being, in the best traditions of our profession. A mechanism for financial assistance to the impaired physician has been in place in the budget of the association, and can be activated through its officers.

The committee envisions an expansion of our present efforts to educate our membership in the etiology, identification, confrontation and care of the impaired physician. This will employ an increased membership of the committee, representing the metropolitan areas and other sections of the state, and the formulation of an aggressive program to encourage awareness and identification of the impaired physicians.

The activities of the committee and the association in the problems described are recommended to all the members for their attention and help.

John A. McIntyre, M.D.

An Analysis of Nutritional Knowledge in the General Public

THOMAS D. TINKER, MS, III
RENEE ANN TINKER, MS, III

Despite high interest, positive attitudes and a plethora of information sources, the general public, the nation's largest health consumer, may still possess inadequate and frequently erroneous nutritional knowledge.

In the past decade a number of studies have been conducted to measure the nutritional knowledge and attitudes of specific populations. A common finding in these studies is that the attitude toward nutrition is generally positive, but that the actual amount of accurate information possessed is of a limited scope and is subject to distortions and misconceptions.

In a yet unpublished study on vitamin usage, pretesting of the study's questionnaire with 20 participants yielded evidence to support the theory that misinformation about the usage of vitamin supplements is prevalent. (Table 1) Of the six statements examined in

this pretest, three showed a raw score of <60%. This may indicate that the operational knowledge of many people in the area of vitamin supplementation is extremely limited. This level of knowledge inaccuracy may also indicate that these participants have been exposed to misleading material concerning vitamin usage and have received such material without evaluation. The possibility that these participants do not possess sufficient knowledge to be critical also exists. These data led the investigators to carry out a literature search to locate recent studies describing the content of nutritional knowledge in the general public, the nation's largest "health" consumer. The review yielded studies examining specific populations such as the elderly, women athletes, grocers, and physicians,^{3,11,12,8,10} but presented no comprehensive, recent accounts on the general public. To quantitate levels of nutrition knowledge in the general public and to measure the extent of its deceptions about nutrition is the aim of this study.

Literature Review

The recent rise in public interest over nutrition has shifted much attention to this aspect of medical science, has catalyzed the expansion of nutritional knowledge, and has

given birth to a mammoth "health" industry. Even though the number of "experts and authorities" is growing daily, an enigma remains — why does so much confusion and controversy exist among so many people on a topic so fundamental to life as eating? In Bremer's¹ study on the nutritional attitudes of a university community, almost 20% of the study's population had either read something written by Adelle Davis, a self-acclaimed nutrition authority, and/or would consult her writings for instruction on eating. "Fifty percent of her readers felt that 'organic' foods contain more vitamins and/or minerals than other foods (average for all respondents was 20%)."¹ Sixty-three percent of her readers patronized "health" food stores, while only 15% of all respondents professed to doing so.

As the popularity of food faddism and "organic" foods began to increase, nutrition became a very profitable topic for the media to exploit. Although nutritional information is rarely falsified, it is commonly presented out of context and as such can mislead an uninformed, and therefore, susceptible public. Misinformation about food and nutrition was widespread in all areas studied by Jalso.² Inaccurate beliefs were prevalent in the areas of "health" foods, soil depletion, chemical fertilizers, and insecticides. "Faddists" ideas were most tenaciously held by those with less formal education, the elderly, and those in lower income groups. Among these people the use of nutritional supplements and special "health" foods was extensive. Grotkowski's³ work in the area of the nutritional knowledge and attitudes of the elderly revealed that attitudes

toward diet are more influential on eating behavior than is knowledge. Seventy-one percent of the study group held misconceptions about weight reducing diets and 58% felt vitamin/mineral supplements were a necessity. Reported sources for the acquisition of nutritional knowledge were magazines, television, doctors, and cookbooks. Magazines were listed as the chief source of dietary information.

"Why does so much confusion and controversy exist among so many people on a topic so fundamental to life as eating?"

Several studies have been conducted to calibrate the nutritional knowledge of the very young and adolescent in our society and of those who instruct them. Petersen and Kies,⁴ in their study of early elementary teachers in Nebraska, have shown that despite the teachers' awareness of the need to eat a good breakfast, few were certain of the constituents of an adequate breakfast. The results of this study revealed that teachers tended to score higher on questions of a general nature while missing those related to food composition. During these years in a child's life when school is a major determinant in the development of food habits, can we achieve our social and educational goals when the status of nutritional knowledge among the instructors is substandard? In Bell's⁵ study on the effectiveness of

Table 1. Raw Scores on Nutritional Statements
in Vitamin Supplement Usage Pretest

*Nutritional Statement	True	False	Don't Know	Raw Score
1) Vitamins provide energy in the form of calories.	0	14	5	73.7
2) It is impossible to get all the vitamins we need each day from our food.	7	11	2	55.0
3) The use of vitamin supplements keeps you young	0	18	2	90.0
4) The use of vitamin supplements prevents the common cold.	2	14	4	70.0
5) The use of vitamin supplements makes you generally more healthy.	13	4	3	20.0
6) Natural vitamin supplements are better for you than synthetic vit. supplements.	8	5	7	25.0

*All statements when answered correctly are false.

nutrition education in a group of fifth graders, the experimental group scored significantly higher on didactic material and showed significant levels of information retention for six weeks. Findings gave support to the thesis that nutrition education can affect dietary behavior. In Dwyer's⁶ study of the nutritional literacy of high school students, the level of interest in nutrition was relatively equal to other sectors of their health education, with girls displaying more interest and scoring higher on examinations than boys. The mean score on the examination designed to assess nutritional knowledge was 55% in this study. In spite of the higher overall scores on the tests and their greater interests in weight control, girls scored lower on areas of the tests pertaining to weight control, energy metabolism and energy output, thus pointing to their susceptibility to misinformation.⁶ These findings support the theory that belief in and acceptance of nutritional fallacies are common in this age group. "Wrong answers on nutrition tests are often indicative of misinformation or wrong learning rather than a total lack of knowledge because of the prevalence of unfounded beliefs based on misinformation, folklore, tradition, and superstitious beliefs."⁶ These same nutritionally illiterate adolescents grow to become nutritionally illiterate adults and so the cycle continues. In her study of high school graduates, Schwartz⁷ found that enrollment in high school home economics courses was not consistently associated with scores in nutritional knowledge, attitudes and practices *ie*, higher mean scores were not statistically significant. General questions relating to nutritional concepts were most often scored correctly, while questions on vitamin supplements, food composition, and relationships between dietary fats were missed most frequently. When dietary practices related to the basic four food groups were monitored, the intake of foods in the fruit and vegetable groups was deficient. Magazines, newspapers and books were cited as the most common references for nutrition information. A positive correlation was found

between nutritional opinions and nutritional practices in this study.

In studies to survey and quantitate the nutritional knowledge possessed by those in the health fields, the results were alarming. Krause,⁸ in her study of physicians, found that although attitudes were favorable, knowledge was limited. Only 65% of the questions to test nutritional knowledge were answered cor-

**"As the popularity of food fad-
dism and 'organic' foods began
to increase, nutrition became a
very profitable topic . . ."**

rectly. Vickstrom's⁹ investigation also found positive attitudes toward nutrition education among registered nurses. Although 75% of the questions to test nutritional knowledge were answered correctly, the adjusted scores were much lower because of the low degree of certainty with which the majority of questions were answered. Physicians, medical students, student nurses, and theology students examined by Dugdale¹⁰ were measured for levels of perceived, accurate and correct nutritional knowledge. All groups had high levels of perceived knowledge (number of responses marked yes or no/total number of responses), generally greater than 80%. However, the accuracy of the knowledge (number of correct responses/number responses marked yes or no) was surprisingly low. Among physicians, 79% of the perceived knowledge was accurate, while a dramatic decline was observed going from the medical students (70%) to the student nurses (54%) to the theology students (36%). Almost two-thirds of the nutritional "knowledge" held by theology students in this study was therefore false. From these statistics it is plain to see that each group thought it knew more about nutrition than it actually did. The accuracy of knowledge among physicians ranged from 40% to 100%. The range for medical students was 33% to 100% and for the student nurses a range of 0% to 100% was scored. A baseline of 40% for physicians, 33% for medical students and 0% for student nurses casts a shadow of doubt onto the validity, accuracy and reliability of their nutritional advice.

Thomas D. Tinker and Renee Ann Tinker are both third-year medical students at the University of Oklahoma Health Sciences Center. Work on this article was completed during a summer research project under the supervision of Dr Wilson D. Steen, Head of the Department of Community Medicine.

If, as the preceding studies have shown, health professionals who have completed college level courses in nutrition and biochemistry continue to possess inaccurate information, to what level does this inaccuracy rise in the general public? Although ignorance can be relieved through education, false beliefs are not as easily abrogated. These misleading opinions are dangerous because the influence they exert on actual dietary practices supercedes the application of sound nutritional knowledge. This study measures the nutritional knowledge in a sample of the general public. These data may yield an indirect indication of the extent to which panacea-type philosophies have inundated the general public and are effectively influencing its nutritional knowledge, attitudes and practices.

Methodology

Several methods of obtaining data for this study were considered, *ie*, door-to-door surveys, telephone surveys and surveys conducted in public facilities. Two large shopping malls in Oklahoma City, Crossroads Mall and Shepherd Mall, were chosen because their patrons create a sampling population which is diverse with respect to age, sex, ethnic origin, socioeconomic status and education level and is representative of the general public. Crossroads Mall, the largest shopping mall in Oklahoma City, was chosen as one of the locations for the survey because its patrons include people from the inner city, residents of small Oklahoma

"... Doctors never ranked among the top three nutritional information sources cited."

towns and tourists. Shepherd Mall attracts a somewhat different population than Crossroads Mall. A large number of its patrons live in the older surrounding residential areas and are young married couples, families of a lower socioeconomic class and elderly people who use the mall for walking and social gathering. The surveys were conducted on Saturday and

Sunday in the same weekend so that the sampling would not exclude those who work during the week.

Prior to the days scheduled for the survey, the investigators met with the managers of both malls and discussed the purpose and goals of the study. Both managers were responsive and allocated available mall facilities for the survey's use. Two signs were printed by the Oklahoma University Health Sciences Center paintshop which announced the survey to mall patrons. Each sign conveyed the following message:

NUTRITION SURVEY
a research project of the
DEPT. of COMMUNITY MEDICINE
OU Health Sciences Center

Due to prior reservation, the public relations booth at Crossroads was unavailable; therefore, the survey was operated from a large, draped, folding table which was situated adjacent to an energy exhibit. A good number of patrons did not differentiate the survey from the exhibit, and with only one side of the survey table exposed to traffic flow, public responsiveness was diminished. Nevertheless, 300 completed surveys were collected after 9½ hours. At Shepherd Mall the booth reserved for this study was located in the center of the mall walkway and had its complete circumference exposed to traffic flow. The fact that the booth was constructed in the mall for such purposes and was clearly visible gave the study a more professional appearance. This location created credibility, afforded greater accessibility to traffic flow and shortened the sample collection time by almost 20%. Three hundred surveys were also filled out at Shepherd Mall.

The total population in this study included 600 mall patrons. Of this number, 279 were males and 321 were females. Of the ethnic groups participating, 507 were white, 19 were American Indian, 12 were Asian, 48 were black, and 14 were Hispanic. Seven different age groups were surveyed. Of these, 120 were in the category 10-19 years, 196 were in the category 20-29 years, 103 were in the category 30-39 years, 51 were in the category 40-49 years, 55 were in the category 50-59 years, 49 were in the category 60-69 years and 26 were in the category 70+ years. Of the education levels monitored, 25 had 6-8 years of education, 241 had 9-12 years of education, 249 had 13-16 years of education and 85 had 17-22 total

years of education. A comparison of the preceding values with the 1980 Oklahoma Census Bureau Statistics (Table 2) confirms that this sample was a valid representation of Oklahoma's population.

A questionnaire containing demographic data and a section of 20 statements covering various topics in nutrition functioned as a tool for data collection (Figure 1). Before the survey was administered, it was reviewed for content by a registered dietitian who coordinates the first-year nutrition course at the Oklahoma University College of Medicine, by the chairman of the Department of Community Medicine for test construction, and by expert statisticians at the Oklahoma University Health Sciences Computer Center for survey format. Changes and deletions were made based on their recommendations. After the tool was pretested by ten individuals for readability and completion time, final revisions were made and 600 copies of the survey were printed. Demographic data included age, sex, ethnic origin and years of education. A listing of information sources was given and each participant was instructed to circle the source(s) relied on for nutritional information. The following choices were given: magazines, books, television, your doctor, nutrition courses,

NUTRITION ANALYSIS

1. Age: _____ 2. Sex: A. Male B. Female
3. Years of Education: 6 7 8 9 10 11 12 13
14 15 16 17 18 19 20
4. Ethnic Background: 1. White 2. Black 3. American Indian 4. Spanish Origin 5. Asian
5. Circle the source(s) of your nutritional information: magazines books television your doctor nutrition courses cookbooks food labels.

Please respond to the following statements by circling the appropriate answer.

6. Honey is nutritionally better for you than white granulated sugar. 1. true 2. false 3. don't know
7. The use of vitamin supplements makes you generally more healthy. 1. true 2. false 3. don't know
8. Carbohydrates should be avoided when trying to lose weight. 1. true 2. false 3. don't know
9. Broccoli, cabbage and tomatoes are good sources of vitamin C. 1. true 2. false 3. don't know
10. The RDA (Recommended Daily Allowance) will maintain good nutrition in practically all healthy persons in the US. 1. true 2. false 3. don't know
11. High dietary salt intake has been associated with high blood pressure. 1. true 2. false 3. don't know
12. Eating large amounts of protein builds extra muscle tissue. 1. true 2. false 3. don't know
13. Butter contains more calories than polyunsaturated margarine. 1. true 2. false 3. don't know
14. It is impossible to get all the vitamins we need each day from our food. 1. true 2. false 3. don't know
15. Most of the American public does not get enough protein. 1. true 2. false 3. don't know
16. Taking large amounts of vitamin A can be dangerous to your health. 1. true 2. false 3. don't know
17. Taking vitamin C above the RDA (45 milligrams) prevents the common cold. 1. true 2. false 3. don't know
18. Food grown organically (ie with natural fertilizer) is more nutritious than food grown with chemical fertilizer. 1. true 2. false 3. don't know
19. One must eat 500 fewer calories per day in order to lose one pound of body weight per week. 1. true 2. false 3. don't know
20. Green, leafy vegetables meet vitamin A requirements. 1. true 2. false 3. don't know
21. If one takes vitamin/mineral supplements, it doesn't matter what one eats. 1. true 2. false 3. don't know
22. Excess vitamin C and the B-vitamins are stored in the body for later use. 1. true 2. false 3. don't know
23. Protein contains fewer calories than an equal amount of carbohydrate. 1. true 2. false 3. don't know
24. Daily eating practices have significant effects upon one's health. 1. true 2. false 3. don't know
25. Natural vitamin supplements are better for you than synthetic (man-made) vitamin supplements. 1. true 2. false 3. don't know

Table 2. Comparison of the 1980 Population of Oklahoma with the Population of the Nutrition Survey by Demographic Groups

		Population of Oklahoma	Nutrition Study Population
Sex	Female	51.2	53.5
	Male	48.8	46.5
Ethnic Group	White	85.8	84.5
	Amer. Indian	5.6	3.2
	Black	6.7	8.0
	Hispanic	1.8	2.3
	Other*	1.7	2.0
Age Group	10-19**	16.9	20.0
	20-29***	17.8	32.7
	30-39	13.4	17.2
	40-49	10.0	8.5
	50-59	9.9	9.2
	60-69	8.4	8.2
	70+***	8.4	4.3

*The study population was comprised mainly of Asians and is so referenced in the text.

**Ages given in years.

***The proportion of the study population in the 20-29 group was twice that of Oklahoma's pop., whereas the 70+ group was half. This is expected because the 20-29 group comprises the majority of people shopping and the 70+ group infrequently visits malls.

Figure 1. Nutrition Survey Questionnaire

Analysis / TINKER

cookbooks, and food labels. Each of the 20 statements was answered either true, false, or don't know. To enhance participation the number of statements was limited to 20 and the entire questionnaire was printed on one side of legal size paper. The signs attracted a number of patrons, but the majority needed a verbal invitation to participate. Each participant was provided with a clipboard containing the survey and a pen. The time required to complete the questionnaire ranged from three to 15 minutes. The investigators addressed participants' questions concerning syntax and discussed the project's nature and purpose but did not divulge the correct answers during the survey. Those expressing an interest left their mailing addresses on a separate sheet of paper entitled, "To interested participants." The majority of the participants enjoyed the experience and gave positive feedback after completing the survey. Within two weeks a packet containing the correct answers and explanations plus a booklet with additional nutrition information was mailed to 334 participants, 56% of the study's population.

By design the survey's 20 statements encompassed six different areas in nutrition. Statements were drawn from the following sources: *A Quick Reference to Clinical Nutrition*, a nutrition text used in medical education at the Oklahoma University College of Medicine, *Nutrition Reviews*, a prominent nutrition journal, *Nutrition and Your Health*, a booklet prepared by the United States Government, and *Nutrition and Physical Fitness*, a text for nutrition taught by the University of Oklahoma at Norman. The six categories — weight loss and gain, sources of nutrients, nutrient requirement, metabolism, health relationships, and health foods¹³ — were chosen to help isolate areas of weakness in nutritional knowledge among participants. Each category was represented by three or four statements which were placed randomly in the survey. Knowledge in each category was ranked as either superior (3-4 statements answered correctly), average (2 statements answered correctly) or inferior (0-1 statement answered correctly). This ranking system provided a more comprehensive method for evaluation. Two statements were included as controls to monitor the validity of patron participation. These were: 1) If one takes vitamin/mineral supplements, it doesn't mat-

ter what one eats, and 2) Daily eating practices have significant effects upon one's health. The investigators felt that, at a minimum, three-fourths of the public could answer these statements correctly if thought were applied in completing the survey. High raw score averages on these two statements (91.3% and 93.3% respectively) helped eliminate the possibility of high guessing levels among participants. These two statements helped elevate the levels of superior knowledge in the categories of nutrient requirements and health relationships.

The investigators believe that the general public possesses low levels of absolute knowledge and high levels of deception in the area of nutrition. To test this premise the measurable quantities raw score and deception indicator were employed in this study. The following are the definitions of these variables as they apply to the total study population. "Raw score" measures the level of absolute knowledge. By

"The investigators believe that the general public possesses low levels of absolute knowledge and high levels of deception in the area of nutrition."

definition, it is the total number of correct responses to a statement/the total number of responses to that statement (600) x 100. The inclusion of the third alternative, don't know, allowed the investigators to utilize two new variables, perceived knowledge and accurate knowledge (10). "Perceived knowledge" is the total number of responses to a statement marked either true or false/the total number of responses to that statement (600) x 100. This measurement expresses how much is thought to be known. "Accurate knowledge" is the total number of correct responses to a statement/the total number of responses marked either true or false to that statement x 100. This value tells how much of what is thought to be known is actually correct. The ideal situation sought by all educators is attained when levels of both perceived and accurate knowledge are high. In this case, the number of responses marked "don't know" would be low and perceived knowledge would approximate the raw score.

Table 3. Summary of Nutritional Knowledge* on Industry Claims

"Health" Industry Claims	Perceived Knowledge	Accurate Knowledge	Deception Indicator	Raw Score
1) The use of vitamin supplements makes you generally more healthy.	91.3	40.9	59.1	37.3
2) It is impossible to get all the vitamins we need each day from our food.	94.5	62.6	37.4	59.2
3) Most of the American public does not get enough protein.	88.3	35.7	64.3	31.5
4) Food grown organically (<i>ie</i> with natural fertilizers) is more nutritious than food grown with chemical fert.	82.8	37.6	62.4	31.2
5) Natural vitamin supplements are better for you than synthetic (man-made) vitamin supplements.	82.2	31.4	68.6	25.8

*For explanations of perceived and accurate knowledge, deception indicator and raw score see text.

A "deception indicator," as defined in this study, is 100% minus accurate knowledge. Its use yields rough estimations of nutritional knowledge inaccuracies in the range of one's knowledge but does not quantify the volume of this knowledge. For example, if among ten questions six are marked "don't know," then four are perceived as being known. If all four are answered correctly the deception indicator (100% — accurate knowledge) would be zero. As defined for the individual, accurate knowledge = the total number of correct responses/the total number of responses marked either true or false. This example plainly illustrates the fact that one can have a high level of accurate knowledge and a low deception indicator without possessing a large volume of knowledge. Hence the need for perceived knowledge values becomes evident.

If the goals of education are achieved, *ie*, high levels of perceived and accurate knowledge, the deception indicator would fall. The higher the indicator's value, the greater the level of deception. For example, if one's perceived knowledge is 80%, 8 of 10 questions are thought to be known. If four of these eight are answered correctly, accurate knowledge. The deception indicator would also be 50% in this case. This coupling of a relatively high perceived knowledge with a high deception indicator implies that this person, in reality, knows much less than he thinks he does. Since there was admission to lack of knowledge by this person on only 20% of the questions, the possibility exists that he has referred to information sources which gave inaccurate or incomplete coverage of the examined topics.

Some nutrition supplements/health food industries are spending large sums of money on campaigns to convince the public that their "natural, organic" products are essential for maintaining good health. To obtain an indication of their success, the investigators placed five false statements in the survey which are presently advocated by some of these industries. Deception indicators were figured and reported in two categories in this study. One indicator measures inaccuracy levels on the 20 survey statements, the other inaccuracy on these industry claims.

A final variable employed in this study is the sources of information per person ratio. This value is calculated as its name implies. Its use is intended to monitor fluctuations in sources of information usage within each of the four parameters studied (age, sex, race, and education level).

Results

The raw score average for the total study population was 50.1%. The mean deception indicator for the survey's 20 statements was 41.4% while the indicator for claims made by some "health" industries was 58.4%. The five statements chosen to depict these claims earned some of the lowest raw scores and highest deception indicators among the 20 survey statements. (Table 3) Among the 20 statements, raw score averages ranged from 13.5% to 93.3%, while deception indicators ranged from 3.5% to 85.7%. When these five statements were considered as a group and compared with the remaining 15 statements (the second group), the results were significant. The

mean difference between the ratio of correct answers for the second group minus the ratio of correct answers for the industry claims was 0.17. The lower ratio found among the industry claims, as a group, was highly significant at $p \leq .0001$. This suggests that those industries promoting these false claims may be effectively convincing the public that their products are necessary for the maintenance of good health.

Sex – For the sex parameter, this study's findings were revealing. Females had higher levels of superior knowledge than males in all six nutritional categories (Table 4), had higher levels of perceived and accurate knowledge overall and had the higher raw score average (53.2% vs. 46.5% for males, $p \leq .03$). (Table 5). Both sexes listed magazines as their primary source of nutritional information. Males listed television second while females cited labels second and both ranked books third. Television was cited more frequently as an information source by males, and it was males who showed a lower raw score average and higher deception indicators in both categories. Their higher deception indicator on the "health" industry claims (60.7 vs 56.4 for females) may indicate that television is an effective channel for the propagation of these false claims. Males

showed a lower sources of information per person ratio than females (2.0:2.9). Fewer sources are being used by males and yet a larger portion of their information is coming from television. Again, the effect of television is implicated. In this study one out of five females used nutrition courses as an information source, whereas only one out of ten males acknowledged doing so. Although women may watch as much, if not more, television than men, it is possible that the knowledge they possess from courses enables them to more critically evaluate what is presented about nutrition by television media. A weak negative correlation was found in course versus television usage as a nutritional information source, suggesting that people who acquire nutritional knowledge from courses may ignore nutrition misinformation aired over the television.

Education – There was a direct positive correlation between accuracy and total years of education ($r = .38$, $p \leq .0001$) and between raw score and total years of education ($r = .39$, $p \leq .0001$). In 18 of the 20 survey statements, those with greater than 13 years of education displayed the highest levels of accurate knowledge. In all six nutritional categories, the level of superior knowledge increased with advancements in total years of education. (Table 4)

Table 4. Knowledge Classifications (Superior, Average and Inferior) for Six Nutritional Categories by Demographic Groups with Specific Frequencies Included.

			Weight Loss and Gain			Sources of Nutrients			Nutrient Requirements			Metabolism			Health Relationships			Health Foods		
			Knowledge* Classification			Knowledge Classification			Knowledge Classification			Knowledge Classification			Knowledge Classification			Knowledge Classification		
			Inf	Avg	Sup	Inf	Avg	Sup	Inf	Avg	Sup	Inf	Avg	Sup	Inf	Avg	Sup	Inf	Avg	Sup
n=279	Sex	Male	67.0	22.6	10.4	52.0	31.5	16.5	40.5	45.2	14.3	40.1	35.1	24.7	16.5	38.0	45.5	72.8	16.5	10.7
n=321		Female	47.0	30.2	22.8	35.8	36.8	27.4	34.6	44.8	20.6	34.0	37.1	28.9	8.7	45.5	45.8	69.4	15.3	15.3
n=120	Age Groups	10-19	74.2	15.8	10.0	51.7	30.8	17.5	50.8	43.3	5.9	64.2	27.5	8.3	29.2	41.6	29.2	85.0	10.8	4.2
n=196		20-29	56.1	26.5	17.4	39.8	37.2	23.0	38.3	43.9	17.8	38.3	33.7	28.0	10.2	35.2	54.6	68.4	15.8	15.8
n=103		30-39	52.4	28.2	19.4	48.5	29.1	22.4	35.0	46.6	18.4	22.3	38.8	38.9	6.8	41.7	51.5	61.2	20.4	18.4
n=51		40-49	51.0	31.4	17.6	49.0	35.3	15.7	35.3	45.1	19.6	25.5	49.0	25.5	7.8	41.2	51.0	70.6	15.7	13.7
n=55		50-59	40.0	36.4	23.6	30.9	40.0	29.1	27.3	50.9	21.8	14.6	45.4	40.0	5.4	47.3	47.3	67.3	20.0	12.7
n=49		60-69	49.0	34.7	16.3	40.8	28.6	30.6	26.5	40.8	32.7	28.6	32.6	38.8	6.1	51.0	42.9	73.5	12.2	14.3
n=26		70+	50.0	26.9	23.1	30.8	46.1	23.1	23.1	50.0	26.9	42.3	45.2	11.5	7.7	69.2	23.1	69.2	19.2	11.6
n=507	Ethnic Groups	White	55.0	26.4	18.5	41.0	36.1	22.9	34.1	46.8	19.1	33.5	36.5	30.0	10.3	42.4	47.3	69.4	16.4	14.2
n=19		Am. Indian	63.2	26.3	10.5	47.4	21.0	31.6	52.6	36.8	10.5	42.1	31.6	26.3	21.0	31.6	47.4	73.7	21.0	5.3
n=48		Black	70.8	25.0	4.2	58.3	29.2	12.5	56.2	39.6	4.2	54.1	39.6	6.3	18.8	47.9	33.3	81.2	12.5	6.3
n=14		Hispanic	57.1	42.9	0.0	78.6	7.1	14.3	71.4	21.4	7.1	71.4	28.6	0.0	42.9	21.4	35.7	85.7	0.0	14.3
n=12		Other**	41.7	25.0	33.3	33.3	33.3	33.3	33.3	33.3	33.3	58.3	25.0	16.7	25.0	41.7	33.3	75.0	16.7	8.3
n=25	Total Education	6-8	68.0	28.0	4.0	52.0	36.0	12.0	60.0	32.0	8.0	72.0	28.0	0.0	60.0	24.0	16.0	88.0	12.0	0.0
n=241		9-12	64.7	23.7	11.6	51.4	29.5	19.1	46.1	43.1	10.8	51.5	31.9	16.6	17.8	44.4	37.8	82.2	11.2	6.6
n=249		13-16	49.4	30.1	20.5	39.8	37.5	22.5	30.9	47.8	21.3	25.3	42.2	32.5	5.2	42.2	52.6	66.3	17.6	16.1
n=85		17-22	49.4	24.7	25.9	28.2	37.7	34.1	24.7	45.9	29.4	18.8	32.9	48.2	3.5	40.0	56.5	48.2	24.7	27.1
n=600	Total Population		56.3	26.7	17.0	43.3	34.3	22.4	37.3	45.0	17.7	36.8	36.2	27.0	12.3	42.0	45.7	71.0	15.8	13.2

*Values given to define each level of knowledge represent the percentage of people in that category possessing that level of knowledge.

**The study population was comprised mainly of Asians and is so referenced in the text.

Table 5. Summary of Nutritional Knowledge* by Demographic Groups

		Perceived Knowledge	Accurate Knowledge	Overall Deception Indicator	Raw Score	"Health" Industry Deception Indicator
Sex	Male	83.4	54.9	45.1	46.5	60.7
	Female	85.2	61.8	38.2	53.2	56.4
Age Groups In Years	10-19	78.4	48.8	51.2	39.1	63.1**
	20-29	85.1	59.8	40.2	51.5	
	30-39	85.4	62.3	37.7	53.5	
	40-49	83.2	62.2	37.8	51.9	53.9**
	50-59	88.6	64.0	36.0	57.0	
	60-69	88.5	60.6	39.4	54.4	58.6**
	70+	86.7	57.2	42.8	50.0	
Ethnic Groups	White	85.0	59.9	40.1	51.5	56.4
	American Indian	90.0	52.7	47.3	47.9	69.1
	Black	77.4	49.4	50.6	39.1	74.6
	Hispanic	79.4	45.5	54.5	37.1	68.9
	Others***	81.7	63.5	36.5	51.7	49.0
Total Education In Years	6-8	72.8	45.9	54.1	34.2	71.9
	9-12	81.1	52.7	47.3	43.4	68.5
	13-16	87.4	62.3	37.3	54.6	53.1
	17-22	87.8	67.8	32.2	60.2	42.3
Total Study Population		84.3	58.6	41.4	50.1	58.4

*For explanations of perceived and accurate knowledge, overall and "health" industry deception indicators, and raw score see text.

**For explanation see text.

***The study population was comprised mainly of Asians and is so referenced in the text.

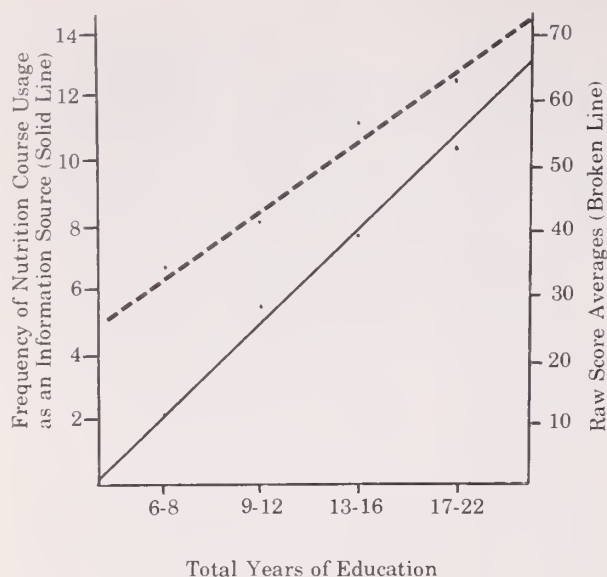
Direct relationships existed among education level, the frequency of citing nutrition courses as an information source, and raw score averages. (Graph 1) An inverse relationship between course usage and both categories of deception indicators was also found as education levels rose. (Graph 2) Television usage as an information source was inversely associated with education level and raw score average (Graph 3), while it was directly related to both categories of deception indicators. (Graph 4) In the four education levels surveyed in this study, doctors never ranked among the top three nutritional information sources cited. In fact, the frequency of referrals to doctors for nutritional information declined with increases in education. (Table 6) An examination of the sources of information per person ratios

in Table 6 reveals an escalation of this ratio with each increment in total years of education. A large portion of the higher sources of information per person ratios found among the more educated is due to the increased frequencies of magazine, book and food label usages in these groups. In this study, each of the preceding sources was found to have highly significant and positive correlations with raw score averages. (Table 7)

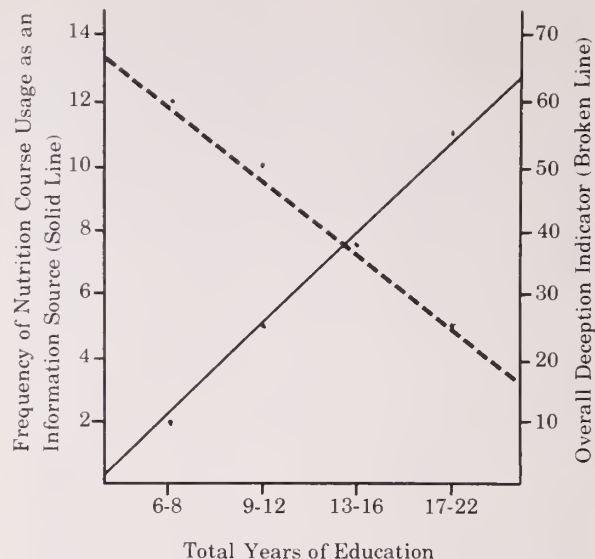
Despite a spread of a 26.0 percentage points between the highest (60.2%) and lowest (34.2%) raw score averages among the four education groups, the mean raw score for the entire study population was only 50.1%. By most academic standards this volume of nutritional knowledge is unacceptable. Even the 60.2% average earned by the most highly edu-

Table 6. Frequencies of Usage Among Three Nutritional Information Sources and the Sources of Information per Person Ratio Variances in Education Levels

	6-8 Years	9-12 Years	13-16 Years	17-22 Years
Sources of Information Per Person	1.8	2.2	2.7	3.0
Course Usage	2.3	5.2	7.4	10.3
Doctor Usage	13.6	11.1	11.0	9.9
Television Usage	20.4	19.3	15.3	11.5



Graph 1. A comparison of years of education with the frequency of nutrition course usage as an information source and corresponding raw score averages. Both scales on the graph specify percentage values.



Graph 2. A comparison among years of education, nutrition course usage as an information source and overall deception indicators. The graph of the first two variables (education and course usage) and the "health" industry deception indicator expresses the same type of relationships found on this graph. Both scales on this graph specify percentage values.

cated would border the D-F range on almost any examination.

Age—The older participants (50-70+ years) showed levels of perceived knowledge that were among the highest for all age groups on all six categories and possessed the highest levels of superior knowledge in four of the six nutritional categories. However, they scored lower on the health relationships and health foods categories. (Table 4) As an example, the 70 plus years group had the lowest level of superior knowledge among all age groups in the health relationships category and the second lowest level in the health foods category. This same group ranked television second among the seven sources and had the second lowest raw score average (50.0%) among all ages. (Table 5)

The 10-19 years group, which had the lowest sources per person ratio (2.0) among all ages, listed television as its primary source of

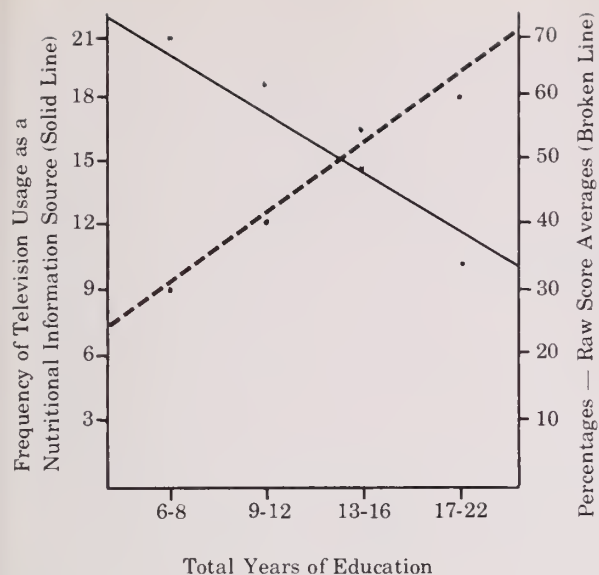
nutritional information. This age group had the lowest level of superior knowledge in four of the six nutritional categories, the highest level of inferior knowledge in all six categories and the lowest raw score average (39.1%) among the seven age groups in this study. This low level of nutritional knowledge among the adolescents in this study strongly suggests an inadequacy in their formal training in this area.

In all age groups except for 10-19 years, magazines were cited as the primary source of nutritional information. Nutrition courses were universally ranked last among the seven sources. The sources of information per person mean was 2.7 for all age groups. Only the 10-19 years group deviated from the average by more than 0.5 points (2.0).

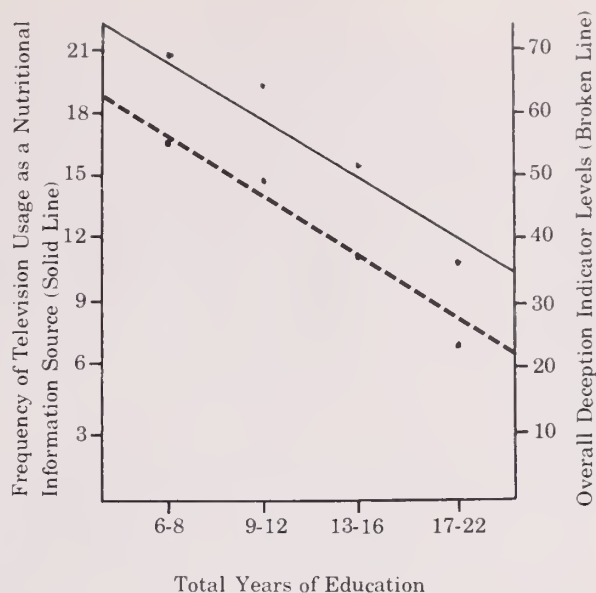
Deception indicators for "health" industry claims showed the middle-aged groups (30-49 years) to be the least deceived (53.9%). The de-

Table 7. Correlations of Nutritional Information Sources with Raw Score

	Doctor	TV	Courses	Magazine	Book	Cookbook	Label
Estimated Correlation Coefficients, \bar{p}	.037	-.036	.279	.237	.234	.168	.186
Probability that $p > \bar{p}$.362	.382	.0001	.0001	.0001	.0001	.0001



Graph 3. A comparison of years of education with the frequency of television usage as a nutritional information source and corresponding raw score averages. Both scales on this graph specify percentage values.



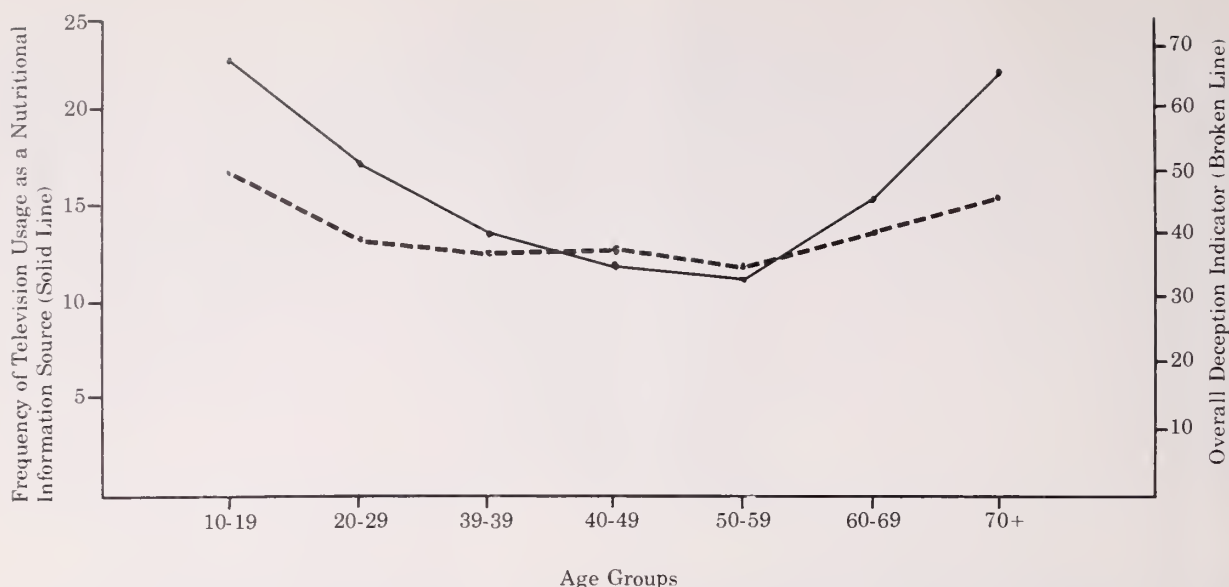
Graph 4. A comparison of years of education with the frequency of television usage as a nutritional information source and corresponding overall deception indicators. The graph of the first two variables (education and television usage) and the "health" industry deception indicator shows the same type of associations found in this graph. Both scales on this graph specify percentage values.

ception indicators for the young (10-29 years) and old (50-70+ years) were notably higher, *ie*, 63.1% and 58.6%, respectively. In both the young and old groups, television was universally in the top three sources listed. Television never entered the top three rank in the middle age groups. Since the frequency of course citing was low in all age categories (>8.5%), the usage of television at higher frequencies among the young and old may explain the elevated deception indicators observed in these groups where television apparently is relied on more heavily as an important source of nutritional information. Graph 5 shows the relationship between television usage as a source for nutritional information in the seven age groups and the corresponding overall deception indicators. In all cases but one (40-49 years) reported changes in television usage were accompanied by like changes in deception indicators. Graph 6 illustrates the association between television usage and raw score averages among the age groups. Again, in every instance but one (40-49 years), fluctuations in reported television usage were associated with a consistent effect, *ie*, inversely related raw score averages.

Among the seven age groups, the 50-59 years bracket consistently attained the best marks in this study's measurement of nutritional knowledge. They possessed the top levels of perceived and accurate knowledge,

the highest raw score average and the lowest deception indicator for the completed survey. (Table 5) This group also listed magazines, books and labels as its three primary sources of nutritional information. As previously stated, each of these sources was significantly associated with higher raw scores in this survey. (Table 7)

Ethnic Group—From this sample of the general public, the participating ethnic groups ranked as follows according to their raw score averages and accuracy levels: Asians displayed the highest level of absolute knowledge about nutrition followed by whites, American Indians, blacks and Hispanics. (Table 5) Among the groups, blacks perceived themselves as knowing the least in four of the six nutritional categories. American Indians perceived themselves as knowing most in all six nutritional categories; however, they achieved the highest level of superior knowledge in only one category, health relationships. (Table 4) Blacks and Hispanics had the lowest raw score averages (39.1% and 37.1%, respectively), the lowest accuracy levels (both below 50%) and the two highest overall deception indicators (50.6% and 54.5%) among the various groups in this survey. (Table 5) Asians achieved the highest raw score average and the lowest overall de-



Graph 5. A comparison of age groups with the frequency of television usage as a nutritional information source and corresponding overall deception indicators. Both scales on this graph specify percentage values.

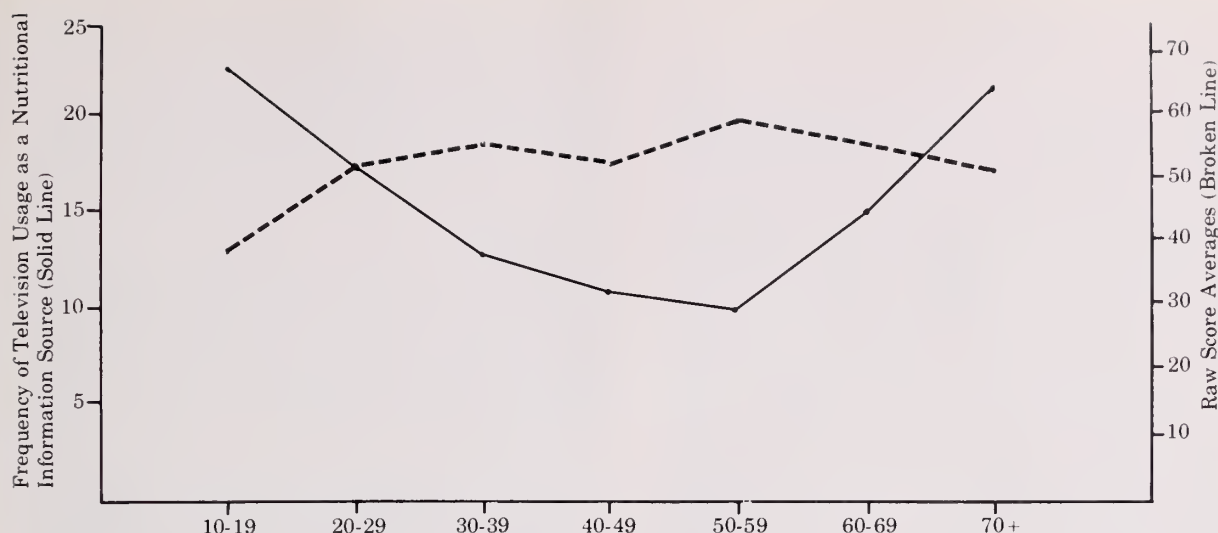
ception indicator. Whites followed closely with the second highest raw score average and the second lowest overall deception indicator. In evaluating "health" claims blacks were found to have the highest deception indicator (74.6%), followed by American Indians (69.1%) and then Hispanics (68.9%). Blacks and Hispanics both ranked television as their primary nutritional information source and both had the lowest levels of perceived knowledge in this study (<80%). The existence of high deception indicators in these two groups where greater than one out of three people in this study relied on television as the primary information source lends further support to the theory that television is acting as a prominent channel for the spread of misleading nutritional information.

Information Source – In the total study population, participants listed magazines as the most common source (21.1%) of nutritional in-

formation. This was followed by books and labels (17.6% each), television (16.1%), doctors (10.9%), cookbooks (9.7%), and lastly courses (6.9%). When an individual information source was matched with the corresponding raw score average for all persons citing use of that source (Table 8), nutrition courses showed the highest average (61.2%). This implies that, on the average, people using courses answered 12.2 of the 20 survey statements accurately. This sharply contrasts with the average 9.9 answered correctly by those using television as an information source. Those citing television as a source had the lowest raw score average among all source users (49.3%). Of the seven sources, television was the only one in which participants who did not use it as a source had a higher raw score average (50.6%) than those who did (49.3%). Of the seven sources evaluated, courses showed the largest percentage point difference between the raw score average of

Table 8. Raw Score Averages for Users & Nonusers of Nutritional Information Sources

	Doctor	TV	Courses	Magazine	Book	Cookbook	Labels
Raw Scores for Source Users	51.2	49.3	61.2	54.2	54.9	55.6	53.9
Raw Scores for Source Nonusers	49.6	50.6	47.7	45.5	46.3	48.3	47.0



Graph 6. A comparison of age groups with the frequency of television usage as a nutritional information source and corresponding raw score averages. Both scales on this graph specify percentage values.

source users (61.2%) and nonusers (47.7%). Course users, on the average, scored 13.5% higher on this survey than nonusers. Magazine and book users showed the next largest difference by scoring an average 8.6% higher than nonusers of these sources. It is apparent that nutrition courses usage and, to a lesser degree, magazine and book usage had significant effects upon overall performance on this survey. The smallest difference in source user and nonuser scores (-1.3%) came from television. The negative sign connotes the observation that use of this source is associated with lowering raw score averages.

A regression model was used to evaluate the effects of these information sources independently. The model determined a type IV sums of squares for each source. An F statistic was evaluated for the probability that the sums of squares due to an information source was equal to the sums of squares of variance in

the study population. The significance of the source increases as the probability decreases. The probabilities of each source are shown in Table 9.

Lack of Knowledge Confirmed

The investigators' hypothesis concerning nutritional knowledge in the general public was supported by this study. The study population's raw score average, 50.1%, vividly illustrates this present lack of knowledge. Initially the investigators hoped to isolate deficient areas in the public's nutritional knowledge, but the data revealed that all areas under evaluation were inadequate. The survey's overall deception indicator, 41.4%, further supports this study's thesis, for it exposes the large discrepancy between what the public thinks it knows about nutrition and what, in reality, it knows accurately. Since nutrition is a fundamental component of each

Table 9. Analysis of Variance for Nutritional Information Sources as They Independently Affect Raw Score

	Doctor*	Television	Courses	Magazine	Book	Cookbook*	Labels
F Value	1.88	5.28	34.53	13.10	11.14	0.95	6.54
p	.1714	.0220	.0001	.0003	.0009	.3292	.0108

*Not significant at $p \leq .05$

person's health and well-being, is it not evident that a supply of accurate nutritional information is a real need among the public? When, as in this study, only one of six people in the general public can list a nutrition course as a source of information, the need to institute effective instruction is clear. The significant and positive correlation ($p \leq .0001$, $r = .279$) that was found between the usage of nutrition courses and higher raw scores (Table 7), and the association of such usage with lower deception indicators in the parameters of sex and education suggests that proper educational training has real potential for advancing accurate nutritional information into the public. Schools have taught mathematics for many years and had this survey measured such knowledge, the scores, undoubtedly, would have been much higher.

One possible means of overcoming the present state of nutritional knowledge in the public is to integrate some aspect of the health sciences (*ie*, anatomy, physiology, nutrition, physical fitness, etc) into each year of the educational program. This should begin early in the educational experience so that by the time of high school, each individual is as comfortable with the basics of health care as he is with the basics of arithmetic. It is the investigators' opinion that certain minimal criteria be established to assist in the instruction of nutrition at each level of education, *ie*, grade school, junior high and high school. For example, at the first level, the importance of nutrition might be stressed, while at the second, sources of nutrients might be covered and at the third level, nutrient requirement and function could be explored. The need for applying this information throughout the entire learning experience can not be overemphasized. It is illogical to expect that one course can adequately prepare students to make wise decisions in food selection.

That interest in nutrition is high among the general public was supported in this study by the fact that 56% of the 600 participants left their names and addresses for a corrected survey and additional nutritional information. This high degree of interest accompanied by a low degree of accuracy and a high level of deception underscores the exigency to implement sound education. The educational system provides an excellent framework for supplying ac-

curate knowledge and for erasing the existing inaccuracy of knowledge.

Family physicians are a possible avenue through which sound nutritional instruction can be propagated. The large volume of people a physician touches and the respect received by the physician make the physician an ideal transmitter of accurate information. However, this study indicates that this potential resource remains largely untapped, for the frequency of citing physicians as a nutritional information source ranked fifth (10.9%) among

"Family physicians are a possible avenue through which sound nutritional instruction can be propagated."

the seven sources examined. Also uncovered in this study was the fact that the use of physicians as a source of nutritional information was not associated with significantly higher scores on this survey. (Table 9) This finding of "non-significance" is indeed quite significant because of its implications. A large segment of the public is dependent upon physicians for accurate health information, but apparently, only a small percentage are receiving assistance in the area of nutrition. The physician can become more active in nutrition education by answering patients' questions concerning personal nutrition, by handing out brochures in their offices which cover topics in nutrition, by taking a more active interest in patient nutrition, and by making more referrals to dietitians. An example of effective education is the topic of dietary salt and its effect on blood pressure. Excluding the two control statements, no other statement in this survey earned a raw score average as high as the statement, "High dietary salt intake has been associated with high blood pressure" (80.8%). The deception indicator for this statement was the third lowest in the survey. Among the six nutritional categories, it was the health relationships category, to which the above statement belongs, that had the highest level of superior knowledge overall. (Table 4) When the average and superior knowledge percentages for the category were combined, 87.7% of the study's population was included. This implies that almost nine out of ten people in this survey answered two out of three statements in this

category correctly. This may be an indicator of the advances which can be made in other areas of nutrition if health professionals participate more actively in dispensing accurate nutritional information.

Conclusion

The fact that television was a significant factor in the analysis of variance of raw scores (Table 9), together with the observation of lower raw scores in groups using television as a source of nutritional information leads to the conclusion that television may be disseminating false nutritional information or information that leads to misconceptions. The estimated correlation coefficient, $-.036$, (Table 7), indicating a weak negative association between raw score and television usage, suggests that television users perceived it as being a source of information, when in fact it was a source of misinformation. This study's data also indicate that the possession of accurate nutritional knowledge, as supplied in formal education, may counter the confusion which television talkshows and advertisements inevitably generate in the public.

Some of the "health" industries are speaking more loudly and more convincingly to the public than are physicians and educators about what is necessary for the maintenance of good nutrition. The survey's five statements included to monitor the effectiveness of these industries' advertisements portend the magnitude of their success in misleading the public's beliefs about nutrition. The data in this study showed that the level of knowledge inaccuracy was significantly higher among those who more frequently chose television as a source for obtaining nutritional information in all evaluated demographic parameters (age, sex, race, and years of education). Were a larger portion of the public relying on more accurate information sources, such as health professionals and nutrition courses, they would certainly be better equipped to more critically evaluate advertisers' claims and promises. Large sums of money spent on unnecessary dietary supplements could be invested more wisely in more credible and justifiable areas of preventive medicine.

Further studies implicated as a result of these data are numerous. In-depth analysis of the different sources of nutritional information may elucidate the major culprits of deception and, thereby, pinpoint remedial steps to correct

the error. Television, as well as other media sources, can undoubtedly play more effective roles in dispersing accurate nutritional information if the need for such dispersion were to become evident to more people. For such a case to be made, further research compiling more statistics and generating fresh approaches to solutions is needed. Surveys in the health professions have found that levels of nutritional knowledge are lower than expected even here.⁸⁻¹⁰ Studies to evaluate the quality of nutrition education in medical schools and other health professions are needed. Research to evaluate attitudes toward nutrition and studies aimed at establishing basic criteria for nutrition education will assist in more rapid implementation of adequate nutrition education in the public school systems. All ethnic groups participating in this study showed depressed levels of nutritional knowledge. However, marked differences in deception indicators, levels of perceived knowledge, and preferences in information source usage existed among the groups. Cultural biases may be major determinants in these attitudinal expressions and differences in knowledge. Such findings need to be evaluated in more depth if effective steps are to be taken to remedy the present state of nutritional knowledge in the American public.

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Medicine in China: The Continuing Revolution — Part II

TERESA THOM

When the United States introduced the Chinese to medical specialization in the early 1920s by way of the Rockefeller-financed Peking Union Medical College, it was done with the best intentions. The Americans thought that if they taught the Chinese the "American way" of practicing medicine, China could go about solving her massive medical problems. Subsequently, western medical techniques were taught to the Chinese and a standard of American professionalism was adhered to. However, the health care system instigated by the westerners did little to address the serious medical problems facing the Chinese.

The American concept of prolonged specialized training for a medical professional came under attack during the Great Proletarian Cultural Revolution, from 1966 to 1976. Perhaps more than any other group, the western-trained doctors felt the Revolution's hand of coercion. From 1949 to 1966 they had worked hard at preparing scientifically trained doctors — specialists, practicing at international standards. The big city hospitals were equal to any in the world. But most of the Chinese people were not in the big cities and were not likely to be served by these special skills.

Although it is typical for American physicians to think that "West is best" in the area of medicine, the Chinese have proved that other approaches to medicine can be more effective in meeting the needs of the people in differing cultures — especially in Third World countries.

With the Cultural Revolution, the Chinese eliminated the American concept of medical training and launched an entirely new health care system — the results of which are readily apparent in China today. There is an availability of health care for all people, with the barefoot doctors serving as the first medical contact for the people in their communities. Under Mao Tse-tung's directive, "Let the past serve the present," the Chinese have gone back to restudy their ancient forms such as herbology and acupuncture, and these traditional medical practices are being combined with western medicine in their medical system.

Today, medical care is built into the structure of Chinese life and all health-related services, including medicine, are free — except for a nominal fee of \$3 to \$5, which is charged for surgery. Every level of schooling in China also is free, including textbooks and meals, and medical students become employees of the

state upon graduation. The government assigns where they will practice, according to need.

Such a system of socialized medicine is so contrary to the free enterprise system of the private practitioner in America that many physicians simply reject the entire Chinese medical package, without taking the time to look into what the Chinese may have to offer.

Throughout this article, differing approaches to health in China will be explored in terms of what American physicians could gain from a clinical exchange with their Chinese counterparts.

Quality and Quantity of Care

Members of the Sino-American Gastroenterology Study Tour, the 2½ week clinical study of the People's Republic of China and Hong Kong conducted last October, were amazed with the quality and quantity of medical care the Chinese delivered.

"I was amazed at the quality of medicine that was practiced and at how healing could be brought to a tremendously large mass of people much more economically than we deliver it," said tour participant William Turner Bynum, MD, of Oklahoma. "I was very much impressed by the caliber of their medical records and by the dedication and devotion the doctors we saw had towards medicine."

Bynum was particularly impressed with the ability and attitude of Dr Xu Jia Yu of the

ceives the equivalent of about \$80 a month. During rounds with him one morning he seemed to have a warm, personal relationship with each of his patients, and he displayed in-depth knowledge of their histories — without referring to a chart."

During the tour, the Americans had the chance to visit medical schools, hospitals, clinics and neighborhood centers in a variety of

"With the Cultural Revolution, the Chinese eliminated the American concept of medical training and launched an entirely new health care system."

city and village settings. By observing facilities, patients and medical staff at work, the Americans were able to get a general idea of what medical care is like for the average Chinese.

Bynum said the tour members found it phenomenal that quality medicine was being practiced when, in many cases, the Chinese were called upon to combine traditional and western medical techniques.

"There never was any suggestion of resentment or defensiveness among the differing practitioners," Bynum pointed out. "And the western practitioners never made light of the eastern practitioners and traditional Chinese doctors, like we Americans tend to. The Chinese seemed to be proud of what they were doing and worked as a unit."

Traditional Medicine

Traditional medicine dates back thousands of years in Chinese history, and there are several theories of oriental philosophy which need to be understood for a general discernment of the oriental attitude towards healing.

Tao is central to the oriental theory and means "the way." The Tao is comprised of three parts: the yin, the yang and the universe. The yin and the yang fall within the universe and are two separate entities, but cannot be separated. The orientals believe that there are 12 separate meridians that run throughout the body. A meridian is a small, hollow tube that starts at one point in the body, travels to another point and ends. Where it ends, another

"Traditional Chinese physicians believe that any disease can be treated with acupuncture . . ."

Shanghai 2nd Medical College. This middle-aged physician gained the immediate respect of the Americans, Bynum said, because of his up-to-date knowledge of medicine, his genuine interest in medical communication and the care of his patients, and the interest, dedication and devotion he demonstrated for the medical profession.

"Dr Xu seemed almost saintly to me," Bynum recalled, "because he works so hard for so very little pay. He has a very distinguished position in Chinese medicine, and yet he re-

meridian starts. The entire body is encircled by these tubes and energy flows through them. Each meridian is either a yin or a yang meridian, but there always is some yin in a yang meridian and some yang in a yin meridian.

The meridians relate to organ systems — although they do not comply with western anatomy — and it is believed that the discomfort experienced with all illness or disease is due to an imbalance in the meridians affecting that particular area of the body. In order for the body to be healthy again it must be brought back into harmony with the mind and the environment.

There are several different techniques used by the traditional Chinese physicians to achieve balance and harmony. There are 365 acupuncture points on the body, which occur on these meridians, and acupuncture is one method used by the Chinese. Moxibustion also is used for specific diseases. With moxibustion, specific herbs are burned over an acupuncture point on the skin, but the skin itself is not burned. Electrical stimulation, ice and dull pressure are other techniques used to restore man's balance with nature, allowing him to make a complete adjustment with the universe.

Traditional Chinese physicians believe that any disease can be treated with acupuncture, although neither western nor Chinese

"The Chinese have been expanding their knowledge of medicinal plants and . . . have made remarkable advances in the field of traditional herbal medicine."

researchers have found an acceptable theory as to why therapeutic acupuncture works.

Joseph C. Lee, MD, PhD, who was born, raised and educated in China and now is living in Oklahoma City, said the most popular hypothesis for the treatment's effectiveness is that acupuncture stimulates the sympathetic nerve, either exciting or inhibiting it, depending on the point. Acupuncture also will dilate the peripheral arteries, especially the arterioles, and help correct poor blood circula-

tion. This means that certain degenerative diseases, such as rheumatoid arthritis, can be treated effectively with acupuncture.

Acupuncture anesthesia, which was developed by the Chinese, has proven safe and effective as a form of surgical anesthesia. Patients under such anesthesia remain mentally clear throughout the entire course of the operation and their various body sensations and physiological functions remain essentially normal, since only the part that needs to be numbed for a pain-free operation is needed.

"Many herbs and plants once widely used in folk medicine have yielded drugs of great interest in the practice of scientific medicine."

Lee said that this procedure effectively anesthetizes a patient for such operations as an appendectomy, thyroidectomy or lobectomy. It also has been used very effectively on abortion patients.

Several years ago an American Medical Association research lab discovered that acupuncture induces the brain to produce a chemical called endorphin — a substance naturally produced in the brain. Endorphin, which is a member of the morphine family, causes the body to produce its own morphine to anesthetize itself. And Lee said that the Chinese affirmed this discovery in 1980 when a neurophysiology research lab in Shanghai discovered the same endorphin.

"However, this kind of morphine induction works only on certain patients for certain operations," Lee emphasized. "So the Chinese surgeons often have to reinforce the acupuncture with another anesthesia by gas or injection."

For hundreds of years the Chinese didn't put any effort into finding out why their traditional techniques work. Their religious beliefs prohibited them from desecrating bodies by dissecting them for research. But under the guidance of Mao Tse-tung's health directives and in enthusiastic response to his call for the Chinese to explore and raise their medicine and pharmacology to a higher level, the Chinese began doing scientific research in

many areas relating to medicine. Currently there is considerable enthusiasm for developing a more scientific traditional Chinese medicine.

However, it's not surprising that many of the traditional physicians, who have been practicing for many years, don't really care how it works — just as long as it works.

Herbal Medicine

Acupuncture is only one branch of Chinese traditional medicine. The time-honored practice of herbal medicine covers a much larger field and is much more common. The Chinese have been expanding their knowledge of medicinal plants, and in the past 20 years or so, Chinese biomedical scientists have made remarkable advances in the field of traditional herbal medicine.

A number of herbal drugs have been developed for the treatment of coronary disease and the results have been encouraging. Chinese clinicians can administer these drugs either orally or intravenously and sometimes they are used in conjunction with western medicines. They have successfully treated acute appendicitis without surgery, using only herbs. Chinese scientists have isolated a number of useful chemical compounds from herbs, determined their formulas, and successfully synthesized some of them.

If you had mentioned herbal medicine to most American scientists and physicians a few years ago, they probably would have just smiled and patted you on the head. Herbal remedies were embarrassing reminders of medicine's dark ages. "Real" drugs were born in biochemical laboratories. The roots, barks, leaves and berries of the folk healers were considered to be virtually useless for treating any kind of disease or illness.

But now, researchers are discovering that synthetic drugs aren't always the answer. A quarter of all drugs in the US already come directly from flowering plants and almost half

contain natural products. Many herbs and plants once widely used in folk medicine have yielded drugs of great interest in the practice of scientific medicine.

Modernizing the System

After a decade of disruption engendered by the Cultural Revolution, Chinese medicine — like all of science — is undergoing a renaissance stimulated by a new government campaign to modernize the country by the year 2000. China is striving to catch up with the rest of the world and has accomplished a great deal medically in a relatively short time.

Lee said one reason the Chinese have been able to do so much so fast is that in China experimentation time is dramatically shorter than it is in the United States because they do not use animals for experimentation.

"They use patients — human beings — as the guinea pigs," Lee explained. "They make a diagnosis for treatment right on the human being, and it works. They don't have to apply the results of animal experimentation to human patients — they are direct."

"There is much America can learn from the Chinese experience in the medical field, without copying the system's structure of content."

However, the Chinese medical system is far from perfect and its structure causes a variety of problems for its physicians. Since all medical services are free, the physicians get a tremendous load of patients who aren't really sick. Bynum said a few physicians told him that they thought the system would work better if the people had to pay a little something for the service. Lee agreed.

"If the patients had to pay, that would cut down on the number of patients. Unless they were really sick they would not go to the physicians. Now, even though they have to line up and wait for hours to get in, they go if they're just uncomfortable."

Surprisingly enough, Bynum said this was the only negative feedback he encountered while in China. "This was the only evidence I saw anywhere of materialistic or capitalistic

Teresa Thom, an Oklahoma City freelance writer, was graduated from the University of Oklahoma, receiving a bachelor of arts degree in journalism. Her articles have been published statewide. She was publicity director for Oklahoma City's Lyric Theatre in 1980 and is currently public relations director for an Oklahoma City advertising agency.

motivations — and it certainly was minimal,” Bynum said. “The doctors we saw seemed to be quite satisfied with their lot in life.”

There is a lot to be learned from studying the Chinese medical system, as the members of the Sino-American Clinical Study group discovered. The Chinese are striving to meet the needs of the people and that is commendable in itself. However, it would be foolish to prescribe these same changes for the disorders of western medical practice. The American society is not commune-based and it is very mobile, whereas China is not. What works in China cannot readily be tailored to work here. However, there is much America can learn from the Chinese experience in the medical field, without copying the system's structure or content.

Lee said that Americans can learn from the Chinese to open their minds. “I find that most of my fellow professionals here in America are

“Whether or not China will be able to catch up with the developed countries in the area of medicine by the year 2000 is yet to be seen.”

very narrow-minded. They should open their minds. If they go to China they will see various medical techniques being practiced on one patient. They treat a patient and they cure a patient — whatever it takes.”

Bynum agrees. “An American doctor could learn humility from visiting China — that's what I got out of it. The Chinese physicians have the attitude of trying to help with whatever tools they have to work with. Here, the MDs are prejudiced against the osteopaths and chiropractors and other purveyors of health care. The Chinese, though, learned to live with each other.”

A more unified attitude towards healing on the part of physicians would be a start toward solving America's health problems, Bynum said. “I think we ought to be more receptive to those offering alternative health care. I don't know why we should be quite so guarded as it seems we are in defending our turf — protecting our economic interests. If we were able to have a more open society, I think we would have a better society.”

Health care in China constantly is evolving and changing and there are many areas of Chinese medicine that the United States — along with the rest of the world — will be watching with great interest. Whether or not China will be able to catch up with the developed countries in the area of medicine by the year 2000 is yet to be seen. As with their other ambitious scientific and technological goals, the main constraint will be the Chinese attempt to accomplish so much in so little time.

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Immunization of Children in Oklahoma

Since 1977, dramatic progress has been made in raising the immunization levels of children in the United States. This success has been reflected by the record low numbers of vaccine-preventable diseases reported for 1981. Recent studies of the immunization levels of school age children in Oklahoma have indicated considerable progress has also been made in this state.

Representatives of the State Department of Health reviewed the immunization records of more than 81,000 school-age children attending schools in ten counties last year. These studies indicated the immunization levels in most schools ranged between 85% and 90% of students enrolled with evidence of adequate immunization on file. Adequate immunization was defined as having received at least three DPT or Td, three polio, measles, and rubella vaccines. In almost every instance, followup actions taken by the schools were successful in raising the percentage of adequately immunized children to greater than 90% of the enrollment. Follow-up studies indicate of the



News From The Oklahoma State Department of Health

81,000 students whose records were reviewed, more than 75,000 (92%) now have evidence of adequate immunization. Several school districts achieved levels of greater than 95%.

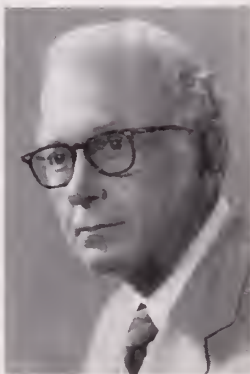
Although immunization levels in the schools were found to be generally high, there were significant numbers of students in attendance with unknown or inadequate histories of immunization. The junior and senior high schools were reported to have the lowest levels. The possibility of future outbreaks of vaccine-preventable diseases cannot be excluded under these circumstances. Accordingly, the schools have been requested to strictly enforce the immunization requirements for school attendance. These studies clearly indicate the need for the immunization of children in Oklahoma to remain a high priority. ☐

COMMUNICABLE DISEASES IN OKLAHOMA FOR JUNE, 1982

DISEASE	June 1982	June 1981	May 1982	TOTAL TO DATE	
				1982	1981
Amebiasis	3	5	1	9	9
Aseptic Meningitis	15	10	4	37	41
Brucellosis	—	1	1	3	3
Encephalitis, Infectious	3	1	3	14	15
Gonorrhea (Use Form ODH-228)	1396	1319	1200	7730	7440
Hepatitis A	31	27	91	318	148
Hepatitis B	29	12	39	160	110
Hepatitis Unspecified	10	13	35	124	80
Malaria	—	2	3	3	5
Measles (Rubeola)	—	—	—	—	5
Meningococcal Infections	3	2	4	16	28
Pertussis	1	—	—	3	1
Rabies (Animal)	11	27	26	115	123
Rocky Mountain Spotted Fever	13	25	15	31	66
Rubella	1	—	—	3	—
Salmonellosis	46	24	25	128	149
Shigellosis	23	20	15	135	116
Syphilis (Use Form ODH-228)	12	11	15	92	90
Tetanus	1	—	—	1	1
Tuberculosis	37	36	39	195	161
Tularemia	7	6	2	11	14
Typhoid Fever	—	—	—	2	4

PLICO Head Warns of 'Claims Made' Competitor

A major malpractice insurance carrier may soon be marketing a so-called "*Claims Made*" professional liability insurance policy to state physicians, according to Doctor C. Alton Brown, President of PLICO and long-term leader of the OSMA's malpractice insurance activities.



"The company and the type of produce it will be selling are most unwanted," Brown said. "I am very concerned that some physicians, particularly the younger ones, may unwittingly buy "*Claims Made*" coverage and be harmed by it.

"While this out-of-state carrier has become legally entitled to re-enter the Oklahoma marketplace after an absence of six years, any success it may have could disrupt the great progress PLICO is making through the united support given to it by the medical profession."

Brown explained that the association has uniquely and traditionally believed in approaching the malpractice insurance problem on a group basis, "and the degree of participation we have achieved has been the most important single reason that the OSMA program has set the national pace for over three decades."

Oklahoma MDs have never experienced anything but the highest-quality "*Occurrence*" type of insurance coverage. "In fact," Brown said, "our first major sponsored commercial carrier — during the 1952-1966 era — was the same company which is now threatening us with intervention via an inferior product called the '*Claims Made*' policy form."

Brown spoke of the ingratitude of the returning carrier. "The application of the group concept to malpractice insurance was more or less

invented by the OSMA in concert with this particular company — they converted it into a springboard for expansion of the idea into about twenty additional states. Now they are back to cause us trouble."

'Claims Made' Defined

A "*Claims Made*" policy only protects the insured physician for the claims he actually makes against the carrier during the course of a policy year. All company liability ends at the close of each year, except for claims actually reported.

The first-year period is typically quite low because the insurer picks up no residual responsibility for prior years. However, the scheme features pre-planned premium increases over the next four years until it reaches a "mature rate."

According to the plan filed with the State Insurance Department, the premiums for the second year will jump by over 100%, followed by a 45% increase the third year and by about 10% increases for the fourth and fifth years.

The theory for the premium escalation is that with each succeeding year of exposure the company picks up more reported claims which didn't materialize in the preceding year or years of "*Claims Made*" coverage. It is estimated that the fifth year will present the true or "mature" picture of how the "accident dates" and the "reporting dates" are going to profile the loss experience of the region.

"It's all theoretical," Brown said, "so much so that it took the '*Claims Made*' carrier 81 pages and 18 exhibits to explain its mathematical gyrations to our Insurance Department. Their insurance concept is not universally employed throughout the industry — any number of major malpractice companies still utilize the higher-quality "*occurrence*" type policy form which PLICO favors.

The truth is that they're marketing a cheapened product, and they are trying to prove its validity with volumes of equations. Any advantage in the "*Claims Made*" policy accrues to the benefit of the company — it takes much of the risk out of their profit protections.

"The doctor who is approached by this company must realize that at the close of each policy year he has no coverage for future claims which he doesn't know about and couldn't have possibly reported to the company."

High Cost of "Buying Out"

"When the sum of the five-year premium escalation plan is compared to the sum of five years' of PLICO premiums, the doctor who buys *'Claims Made'* will find that he's paid out much more money for much less protection," Brown said.

"Then he will want to get out of the program, and will be greeted with a new surprise. A so-called extended 'Reporting Endorsement' will enable him to report newly-discovered claims based on incidents which occurred prior to terminating his *'Claims Made'* policy — but what a price he will pay for the privilege!

"Although the *'Claims Made'* company won't tell him in advance exactly what the cost of the endorsement will be, about the best he can expect is 150% of the 'mature rate' premium for one year. This could cost an orthopedic surgeon with \$1,000,000 in coverage an additional \$15,000 or more to free himself from the *'Claims Made'* carrier." "Anything which takes 81 pages to explain has got to have plenty of clinkers in it," the physician observed.

United Opposition

The *"Claims Made"* company first tried to gain approval of its concept in 1976, but the State Insurance Department quickly rejected it.

A renewed effort was made in 1980, and was vigorously opposed in formal hearings by the OSMA, the Oklahoma Osteopathic Association and the Oklahoma Hospital Association. Although a related Supreme Court decision was being utilized to the favor of the applicant, there were enough technical problems with the filing that the matter was stalled for over a year. But the carrier came back like a bad penny, and finally gained approval in 1982 — although the approval was conditional upon a number of modifications which have further delayed the company's marketing debut.

Brown predicted that the *"Claims Made"* carrier's Oklahoma operations will be short-lived. "I have confidence that OSMA members will stick with PLICO — the company which has given them the lowest rates in America for first-class coverage."

The PLICO Product

PLICO's *"Occurrence"* type insurance policy is simple, straightforward and "good as gold" according to Brown.

"Once you pay a premium for a given year the coverage is there on an indefinite basis — regardless of when a claim is reported, and even after retirement or death. Moreover, there are no hidden charges to pay.

"The actuarial techniques employed by PLICO's management company are universally recognized as valid and sound throughout the reinsurance market. Our own reinsurer accepts our system, and they are the largest and most respected in the nation.

"We use Oklahoma's favorable loss experience as our starting base, and our loss projections are accurate to the point that we are now in our third year of operations without a rate increase.

"Best of all, the OSMA owns the company, and all policy management decisions are made *by physicians for physicians*.

"Our unity of purpose is as important today and in the future as it was when it served us so well over the last 30 years — I sincerely hope that not a single state doctor falls into the *'Claims Made'* trap.

"*'Claims Made'* is malpractice insurance *by the year* . . . PLICO is malpractice insurance *by the career*," Brown concluded. □

Oklahoma Peer Review Group Passes Quarterly Evaluation

The Oklahoma Foundation for Peer Review, Inc. (OFPR) has passed its quarterly evaluation with a score of 1,256 points out of a possible 1,770. The evaluations are conducted by the Office of Professional Standards Review Organization, Health Care Financing Administration, US Department of Health and Human Services.

The OFPR scores for each section of the review were:

Part 1, Administration	135 out of 135
Part 2, Review Process	235 out of 435
Part 3, Impact	886 out of 1200
	1256 1770

This first-quarter score places the OFPR in the top one third of PSROs in the nation. Seven of the 39 PSROs evaluated during the quarter failed to pass the evaluation. □

President Names Dr Calhoon To Cancer Advisory Board

Ed L. Calhoon, MD, of Beaver, has been appointed by President Reagan to serve as a member of the National Cancer Advisory Board. The board advises the National Cancer Institute and helps to coordinate federal funding of institutional cancer research and studies throughout the United States.

Dr Calhoon has held virtually every elective office within the Oklahoma State Medical Association. He served as OSMA president in 1970-71 and currently is a member of the Oklahoma delegation to the American Medical Association.

A native of Beaver, Dr Calhoon has been a general practitioner/general surgeon in the panhandle city since 1954. He received his MD from the University of Oklahoma Health Sciences Center in 1951 and served his internship and residency in surgery at Hillcrest Memorial Hospital, Tulsa.

Dr Calhoon's term on the National Cancer Advisory Board will run until March 9, 1988. □

Pregnancies Drop, Sex Activity Unchanged by Sex Education

Results of a study published in *Family Planning Perspectives*, the journal of the Alan Guttmacher Institute, indicates that sex education programs have the effect of reducing the incidence of teen-age pregnancy but do not appear to lead to increased sexual activity among unmarried young men and women.

The study showed that sexually active young women who had taken sex education courses providing information on contraceptives were more likely to use contraceptives and less likely to become pregnant than peers who had received no such instruction.

The data were based on a nationwide study of metropolitan area teenage men and women conducted in 1979 and a study of teenage women conducted in 1976.

Analysis of the data revealed that 75% of unmarried 15- to 19-year-old women and 17- to 21-year-old men had taken a sex education course in school.

Study results provided overwhelming support for the claim that the decision to engage in sexual activity is not influenced by whether or not teenagers have had sex education in schools. □

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HOW TO SUCCEED IN THE MALPRACTICE BUSINESS



Success is achieved by unity. . .

Oklahoma physicians haven't succeeded in the malpractice business by sheer luck.

Their success has been achieved through unity — in the truest definition of the word.

The long-term winners in the malpractice war are those groups of physicians who recognize the value of banding together where professional liability insurance is concerned.

Insurance is a strategy of numbers and dollars. The size of the group of insureds and the total volume of premium income generated will write the final chapter of success or failure. A high level of participation is especially important in the big-ticket arena of medical malpractice.

Fragmentation is the antithesis of success. Small groups of physicians distributed among several companies are each in predictable trouble — no company will have enough participation and reserves to ride over inevitable losses. Some companies will abandon their insured doctors in favor of more profitable insurance lines, while those which may remain in the marketplace will likely cheapen their policies or charge vastly higher rates — or both.

Beware of any company which plays the role of a spoiler by attempting to destroy the unity so essential to PLICO's long-term success. And be especially wary if the company sells a so-called *Claims Made* policy.

Claims Made insurance baits the buyer with an enticingly low first-year premium — but it's followed by quantum increases over the next four years. If the unwitting doctor lets the policy lapse or wants to change carriers, he's in peril of having no coverage at all for late-blooming claims not previously reported to the carrier.

The *Claims Made* insurance concept puts the protection of the insurance company's profits ahead of the doctor's best interests. Never in their history have Oklahoma M.D.'s had to rely on this type of malpractice insurance.

PLICO is owned by your Association. It sells the highest quality policy available in America at fairly-derived rates. No confusion. . . no surprises. . . no risk that your coverage will evaporate at the time of need.

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Physician Recruits Sought For Army Guard Vacancies

A half-dozen or so physicians could solve a statewide problem for the Oklahoma Army National Guard, according to a Guard spokesman. Enid, Altus, and Lawton each need one physician, and a major medical unit in Oklahoma City could use four-to-six.

"If we could fill these slots, we could have one of the best medical programs in the entire Army National Guard," said Captain Mike McEwen, a health manpower specialist for the Oklahoma Guard. "Our physician's assistant, nurse, and dental officer slots are all filled, but we really need those last few physicians."

The Guard is touting extreme flexibility in weekend and summer training requirements as one of the new programs designed to make it easier for doctors to participate in Guard activities. In addition, the Guard points to such benefits as Army-paid CME programs, excellent retirement pensions beginning at age 60, and low-cost home, auto, and life insurance.

"Considering the time required, we think our benefits are outstanding," McEwen noted. "We have retired medical officers who are drawing \$750 to \$1,000 per month, and they get all the other retirement benefits that regular Army retirees receive."

Guard officials are hopeful that the new "look" of the medical officer program will help solve the current shortage. The Guard also boasts a promotion system that gives physicians upward mobility not enjoyed by other officers.

Under this system, a medical officer with no prior service will begin as a first lieutenant, captain, or major depending on the amount of medical practice experience. From there, promotions are given when a physician completes the required amount of time in each rank. Non-physicians must find a position availability as well as having served the required time in grade. Guard doctors ascend the ranks more rapidly than their non-medical counterparts.

The process for receiving a Guard medical appointment is relatively simple. A routine medical exam is required and copies of such documents as diplomas, licenses and specialty certificates must be submitted. Beyond that, the applicant need only complete two simple

forms and have a set of fingerprints taken. This material is processed through the National Guard and Department of the Army within four-to-five weeks, and the physician can then be appointed and commissioned. There is no requirement for extended active duty, nor is a physician required to remain in active Guard status if the demands of the practice interfere.

More information on the program is available from the AMEDD Recruiting Officer in Oklahoma City at (405) 524-3180 or, toll free, 1 (800) 522-8042. □

Oklahoma City Physician Files To Run For Seat in US Congress

Oklahoma City physician Daniel M. Lane, MD, PhD, has entered the race as the Democratic candidate for the Fifth US Congressional District seat in Oklahoma. The seat is currently held by Republican Mickey Edwards.

Dr Lane, a cancer specialist in private practice, served as finance chairman for the 1976 Fifth District Democratic candidate and as head of "Physicians for Nigh" in 1978. He has been a member of the Oklahoma State Medical Association since 1968.

Dr Lane received his MD in 1961 from the University of Texas Southwestern Medical School and his MS in pediatrics in 1967 from the University of Tennessee Medical Units in Memphis. In 1973 he was awarded his PhD in biochemistry by the University of Oklahoma Health Sciences Center.

Dr Lane served as associate professor of pediatrics at the Tulane University School of Medicine and as assistant professor of pediatrics and clinical assistant professor at the University of Oklahoma Health Sciences Center.

He is a member of the Southwest Oncology Group, the Southern Society for Pediatric Research, the Southwestern Section of the American Association for Cancer Research, the American Academy of Pediatrics, the American Association for the Advancement of Science, the American Association for Cancer Education, and several other medical organizations.

Dr Lane is 46 years old and is married to Carolyn Spruill Lane. They have four children. In addition to his medical practice, Dr Lane is involved in ranching, oil and gas, real estate, and historic preservation.

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Survey of Physicians Predicts Substantial Changes in Medicine

The nation's doctors believe the practice of medicine will change substantially in the coming decade but fear that only a few of the changes will be for the better, according to a survey undertaken by the Henry J. Kaiser Family Foundation.

The survey, conducted for the Kaiser Foundation by Louis Harris and Associates, noted that half of all physicians feel sufficient doubts about the future of medical practice that they would not recommend it as highly today as they would have ten years ago.

Among the predicted changes, the ones that draw the greatest opposition from physicians have to do with loss of autonomy.

Eighty three percent of the physicians agree that private health insurance suppliers will set some kind of ceilings on fee reimbursements paid to physicians in most or all states in the next decade. Only 22% of the doctors think this will be a change for the better; 48% think it will be for the worse and 25% think it will have no effect.

Fifty one percent of the physicians believe that, in the coming decade, more physicians will opt for employed positions rather than self-employment, partnership or incorporation. Only 13% think this will be a change for the better, 46% think it will be for the worse, and 36% think it will have no effect.

In all, the most frequent type of change noted by physicians involves various forms of external regulation with emphasis upon government controls and interference.

The survey also found that 52% of all physicians believe there will be an oversupply of doctors in the next decade and that the surplus will have several important effects.

The doctors believe the oversupply will make it difficult for physicians to practice where they choose, will reduce opportunities for physicians to practice the specialties for which they have been trained, and will lead to changes in hours and patient services. Of these expected changes, only the changes in hours and services is viewed by the physicians as positive.

Other positive changes predicted by the doctors include the delegation of more responsibility to nurse practitioners and physician's assistants for diagnosis and treatment in rural and low-income urban areas, thus making medical care more accessible to the poor. ☐

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Deaths

JAMES RUSSELL KREGER, MD
1917-1982

James Russell Kreger, MD, Tonkawa general practitioner, died April 3, 1982. Dr Kreger was graduated from the University of Oklahoma College of Medicine in 1942. Following his internship in Tulsa, he established his practice in Tonkawa. Among his survivors are his brother Glenn S. Kreger, MD, Tonkawa, and his nephew, Ron M. Kreger, MD, Ponca City.

(The Journal regrets not having learned of Dr Kreger's death earlier and urges county medical societies to notify the OSMA executive offices of any physician-deaths in their communities.)

A.A. WALKER, MD
1898-1982

A Wewoka physician for over 50 years, A.A. Walker, MD, died in mid-July. He was graduated from the University of Oklahoma College of Medicine in 1924. His practice was established in Wewoka where he remained until his retirement in 1965. Dr Walker was a Life Member of the OSMA. □

In Memoriam

1981

<i>C. F. Foster, Jr., MD</i>	<i>October 11</i>
<i>E. E. Shircliff, MD</i>	<i>October 23</i>
<i>S. N. Stone, Jr., MD</i>	<i>November 9</i>
<i>James R. Barnes, MD</i>	<i>December 13</i>
<i>E. Rankin Denny, MD</i>	<i>December 16</i>
<i>John P. Grimes, MD</i>	<i>December 24</i>

1982

<i>Frances P. Newlin, MD</i>	<i>February 16</i>
<i>James T. Maddox, MD</i>	<i>February 21</i>
<i>Joseph F. Messenbaugh, MD</i>	<i>March 12</i>
<i>James Russell Kreger, MD</i>	<i>April 3</i>
<i>Boyd Vance Lucas, MD</i>	<i>April 9</i>
<i>Carlton E. Smith, MD</i>	<i>April 23</i>
<i>Ella H. Murray, MD</i>	<i>May 3</i>
<i>Loyd G. Williams, MD</i>	<i>May 15</i>
<i>A. A. Walker, MD</i>	<i>July</i>

□

College of Surgeons Reports On Second Opinion Programs

The American College of Surgeons (ACS) has published a report on second surgical opinion programs that describes the experiences of several second opinion programs and presents information on both government and private initiatives.

Titled *Second Surgical Opinion Programs: A Review and Progress Report*, the report includes a summary of research findings on overall usage rates, nonconfirmation rates, patient compliance, effects of programs on surgical rates and patient outcomes, program costs and benefits, and mandatory versus voluntary programs. Among the findings were:

- Participation in voluntary programs is consistently low. Most programs blamed poor

patient awareness and patient reluctance to question the first physician's recommendation.

- Nonconfirmation rates in voluntary programs ranged from 30% to 35% ; in mandatory programs rates ranged from 5% to 19%. Often, the nonconfirming opinion was not an unequivocal rejection of an operation, but a recommendation for further diagnostic tests or for a trial of medical treatment before surgical intervention.

- Patients did seem to be influenced by the second physician's recommendation. The majority of patients followed the second physician's recommendation, and patients seeking a third opinion almost always followed that physician's recommendation.

The newly published report updates two earlier ACS reports on the subject of second surgical opinions. □

MEDICAL-LEGAL SEMINARS

1982 SCHEDULE

September 29	Medical Record Law	Oklahoma City
November 3	The Computer in Office Practice	Oklahoma City
November 6	Medical Assisting for the New Employee	Oklahoma City
November 13	Medical Assisting for the New Employee	Tulsa
December 1	Law for the Medical Assistant	Oklahoma City
December 2	Law for the Medical Assistant	Tulsa



For registration information write:
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Teaching Hospitals Program Gets Certificate of Approval

The Commission on Cancer of the American College of Surgeons (ACS) has awarded a three-year Certificate of Approval to the Oklahoma Teaching Hospitals Cancer Program of Oklahoma City.

The Approvals Program was established by the American College of Surgeons in 1956 to encourage the best in cancer therapy. It is designed to promote discussion on cancer problems among surgeons, medical oncologists, oncological radiation therapists, pathologists, and other medical disciplines involved in the diagnosis and treatment of cancer patients.

The Oklahoma Teaching Hospitals also have met the requirement of having a well-maintained tumor registry. The registry keeps a record of each cancer patient, cured or not, and makes certain that follow-up examination and rehabilitation of patients are done systematically at specified intervals. Special studies of cancer cause and treatment are made possible through the use of the registry. □

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OSIM-ACP Annual Meeting Will Convene at Shangri-la

The annual joint meeting of the American College of Physicians, Oklahoma Region and the Oklahoma Society of Internal Medicine will be held at Shangri-la Lodge on Grand Lake, October 29-31, 1982. Among other participating groups will be the Oklahoma Chapter, American College of Cardiology and the Oklahoma Infectious Disease Society.

Office Managers of Internists are planning a concurrent meeting at Shangri-la for the purpose of learning how to better handle insurance problems.

According to F. Daniel Duffy, MD, chairman of the annual meeting committee, an outstanding and innovative program has been planned. Registration cards and reservation forms for Shangri-la will be in the mail soon. Further details may be obtained from Kay Bickham, 601 NW Expressway, Oklahoma City, 843-9571. □

Erratum

The name of James B. Eskridge, III, MD, Vice-President of the Oklahoma State Medical Association, was inadvertently omitted from the list of association officers on page 288 of the August, 1982 issue of The Journal. The staff of The Journal regrets this error.

Miscellaneous Advertisements

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References: 1. Shaw S, Lieber CS: Nutrition and alcoholism, chap. 40, in *Modern Nutrition in Health and Disease*, edited by Goodhart RS, Shils ME. Philadelphia, Lea & Febiger, 1980, pp. 1220, 1237. 2. Watkin DM: Nutrition for the aging and the aged, chap. 28, in *Modern Nutrition in Health and Disease*, op. cit., p. 781. 3. Shils ME, Randall HT: Diet and nutrition in the care of the surgical patient, chap. 36, in *Modern Nutrition in Health and Disease*, op. cit., pp. 1084, 1089, 1114. 4. Dixon RE: *Ann Intern Med* 89 (Part 2): 749-753, Nov 1978. 5. Committee on Dietary Allowances, National Research Council: Recommended Dietary Allowances, ed 9. Washington, National Academy of Sciences, 1980, p. 13.



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References: 1. Williams RL, Karacan I: Introduction, chap. 1, in *Sleep Disorders: Diagnosis and Treatment*, edited by Williams RL, Karacan I, Frazier SH. New York, John Wiley & Sons, 1978, p. 2. 2. Data on file, Hoffmann-La Roche Inc., Nutley, NJ. 3. Kales A et al: *JAMA* 241:1692-1695, Apr 20, 1979. 4. Kales A et al: *J Clin Pharmacol* 17:207-213, Apr 1977 and data on file, Hoffmann-La Roche Inc., Nutley, NJ. 5. Kales A: Data on file, Hoffmann-La Roche Inc., Nutley, NJ. 6. Kales A et al: *Clin Pharmacol Ther* 19:576-583, May 1976. 7. Kales A, Scharf MB, Kales JD: *Science* 201:1039-1041, Sep 15, 1978. 8. Frost JD Jr, DeLucchi MR: *J Am Geriatr Soc* 27:541-546, Dec 1979. 9. Dement WC et al: *Behav Med* 5(10):25-31, Oct 1978. 10. Vogel GW: Data on file, Hoffmann-La Roche Inc., Nutley, NJ. 11. Karacan I, Williams RL, Smith JR: The sleep laboratory in the investigation of sleep and sleep disturbances. Scientific exhibit at the 124th annual meeting of the American Psychiatric Association, Washington, DC, May 3-7, 1971. 12. Pollak CP, McGregor PA, Weitzman ED: The effects of flurazepam on daytime sleep after acute sleep-wake cycle reversal. Presented at the 15th annual meeting of the Association for Psychophysiological Study of Sleep, Edinburgh, Scotland, June 30-July 4, 1975. 13. Zimmerman AM: *Curr Ther Res* 13:18-22, Jan 1971. 14. Kales A, Kales JD: *Pharmacol Physicians* 4(9):1-6, Sep 1970. 15. Data on file, Hoffmann-La Roche Inc., Nutley, NJ.

The Physician's Sleep Glossary

Some common sleep laboratory terms

poly·som·no·graph. An instrument which simultaneously records by electrodes physiological variables during sleep—for example, brain activity (EEG), eye movements (EOG), muscle tonus (EMG) and other electrophysiological variables. These readings indicate precisely when patients fall asleep, how many wake periods they experience, the quality of sleep and the duration of sleep.

sleep la·ten·cy. The period of time measured from "lights out," or bedtime, to the commencement or onset of sleep.

wake time af·ter sleep on·set. Intervals of time spent awake between onset of sleep and the end of the sleep period. The polysomnograph registers the length and frequency of the intervals.

to·tal sleep time. The amount of time actually spent in sleeping. This is estimated by subtracting wake times from the period encompassed by the onset and the termination of sleep.¹

REM/NREM. 1. REM, or rapid eye movement, sleep is "active"—characterized by increased metabolic rates, elevated temperature and arousal-type EEG patterns. 2. NREM, or non-rapid eye movement, sleep represents "quiet" sleep stages. There are four distinct stages of NREM sleep.²

re·bound in·som·nia. A statistically significant worsening of sleep compared to baseline on the nights immediately following discontinuation of sleep medication.³

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Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. An additive effect may occur if alcohol is consumed the day following use for nighttime sedation. This potential may exist for several days following discontinuation. Caution against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Potential impairment of performance of such activities may occur the day following ingestion. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, abrupt discontinuation should be avoided with gradual tapering of dosage for those patients on medication for a prolonged period of time. Use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function.

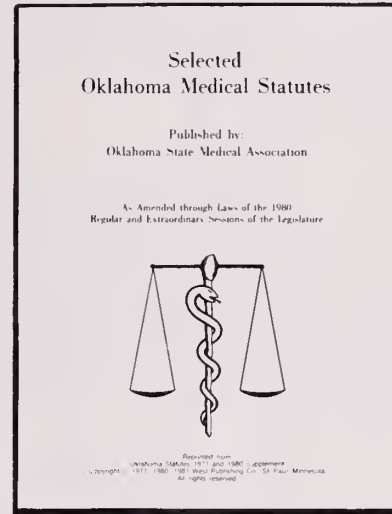
Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase; and paradoxical reactions, e.g., excitement, stimulation and hyperactivity.

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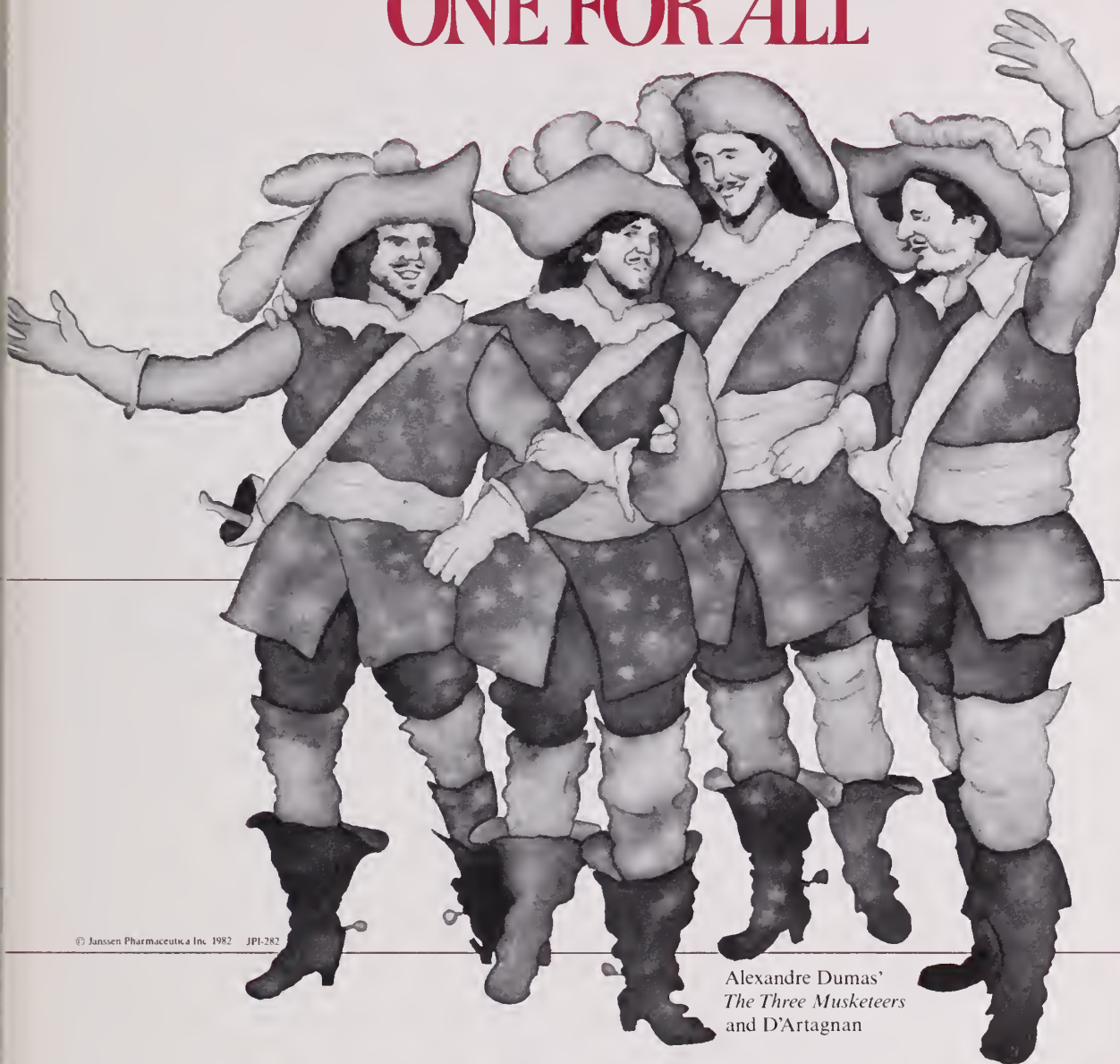
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DESCRIPTION VERMOX (mebendazole) is methyl 5-benzoylbenzimidazole-2-carbamate.

ACTIONS VERMOX exerts its anthelmintic effect by blocking glucose uptake by the susceptible helminths, thereby depleting the energy level until it becomes inadequate for survival. In man, approximately 2% of administered mebendazole is excreted in urine as unchanged drug or a primary metabolite. Following administration of 100 mg of mebendazole twice daily for three consecutive days, plasma levels of mebendazole and its primary metabolite, the 2-amine, never exceeded 0.03 µg/ml and 0.09 µg/ml, respectively.

INDICATIONS VERMOX is indicated for the treatment of *Trichuris trichiura* (whipworm), *Enterobius vermicularis* (pinworm), *Ascaris lumbricoides* (common roundworm), *Ancylostoma duodenale* (common hookworm), *Necator americanus* (American hookworm) in single or mixed infections. Efficacy varies as a function of such factors as pre-existing diarrhea and gastrointestinal transit time, degree of infection and helminth strains. Efficacy rates derived from various studies are shown in the table below:

	Whipworm	Common Roundworm	Hookworm	Pinworm
cure rates				
mean	68%	98%	96%	95%
(range)	(61-75%)	(91-100%)	—	(90-100%)
egg reduction				
mean	93%	99.7%	99.9%	—
(range)	(70-99%)	(99.5%-100%)	—	—

CONTRAINDICATIONS VERMOX is contraindicated in pregnant women (see Pregnancy Precautions) and in persons who have shown hypersensitivity to the drug.

PRECAUTIONS PREGNANCY: VERMOX has shown embryotoxic and teratogenic activity in pregnant rats at single oral doses as low as 10 mg/kg. Since VERMOX may have a risk of producing fetal damage if administered during pregnancy, it is contraindicated in pregnant women.

PEDIATRIC USE: The drug has not been extensively studied in children under two years; therefore, in the treatment of children under two years the relative benefit/risk should be considered.

ADVERSE REACTIONS Transient symptoms of abdominal pain and diarrhea have occurred in cases of massive infection and expulsion of worms.

DOSAGE AND ADMINISTRATION The same dosage schedule applies to children and adults. The tablet may be chewed, swallowed or crushed and mixed with food. For the control of pinworm (enterobiasis), a single tablet is administered orally, one time. For the control of common roundworm (ascariasis), whipworm (trichuriasis), and hookworm infection, one tablet of VERMOX is administered, orally, morning and evening, on three consecutive days. If the patient is not cured three weeks after treatment, a second course of treatment is advised. No special procedures, such as fasting or purging, are required.

HOW SUPPLIED VERMOX is available as chewable tablets, each containing 100 mg of mebendazole, and is supplied in boxes of twelve tablets. VERMOX (mebendazole) is an original product of Janssen Pharmaceutica, Belgium.

US Patent 3,657,267
December 1979

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LET'S TALK BUSINESS

A continuing series on business communication issues.

Increasing Productivity Through Information Management

The ability to increase productivity and remain competitive in the business office of the 80's will depend largely on how you manage information.

With the office consuming 40 to 50 percent of today's corporate expense dollar, nearly half the workforce deals with processing information rather than producing concrete products.

As a result, the tools of the 1800's – the typewriter, face-to-face meetings and even the telephone as we know it – are evolving into the systems which will make up the "office of the future."

Let's examine some of the ways that improvements in the management of information can begin to increase your productivity right away.

Increase Your Competitive Edge with Electronic Systems

To increase your competitive edge, you must improve on standard methods of operation. And electronic systems can help you. Too frequently, we simply accept traditional methods of communication.

Today's electronic communications systems have many time-saving features to help both large and small businesses. Automatic Callback, Call Forwarding, Call Waiting, Call Pickup and Automatic Route Selection are just a few of the features designed to minimize time wasted on call-backs and busy signals.

But the real advantage is system flexibility. Electronic telephone sets can be individually programmed so you can assign the right combination of features to each of your employees. And, you can make feature and station changes yourself – without the assistance of telephone company personnel. More long term, as technology advances or your needs change, software packages can be added to include new capabilities.

More Productive Meetings

Meetings eat up a large amount of managerial time –

especially when travel is involved.

While some face-to-face meetings will always be needed, in many cases, teleconferencing can help displace travel, reduce expenses and obtain immediately resolution to business problems.

Most multi-button and electronic systems have teleconferencing features for a minimum of three locations. And special telephones – as simple as an inexpensive speakerphone – can expand teleconferencing capabilities when several people are involved at a particular location.

A number of new teleconferencing products such as the high-quality GATT (Quorum Group Audio Teleconferencing Terminal) can be installed in conference rooms for audio teleconferences involving large groups. And the Quorum Omnidirectional Microphone and Loudspeaker can enhance the transmission quality of GATT – or the speakerphone – even further.

Picturephone Meeting Service will become available in many cities in 1982. Besides enabling meeting participants to see and talk to each other, each video teleconference room will be equipped with cameras to

display slides, charts and other graphic materials.

A New Approach to Sales

Two components – technology and management systems, work together. And much of the technology that exists today is provided by Bell.

New telecommunications technology makes it possible to set up centers within a company to support and supplement the outside sales force. For example, a Telemarketing representative can respond to customers by using a data terminal to access preplanned questions that determine customer needs, find out shipping, billing and credit information and even make inventory adjustments.

WATS, 800 Service, automatic call distributors and data terminals are some of the ingredients needed to make a Telemarketing center work. Your Bell Account Executive can give you some help with management systems and procedures needed to actually get a Telemarketing program off the ground.

Stay Informed

You'll have questions from time to time regarding how to better manage your planned and existing communication systems. Obviously the entire subject could not be covered here.

So here's a suggestion: Call your Southwestern Bell Account Executive (or one of the toll-free numbers below) for more in-depth information.

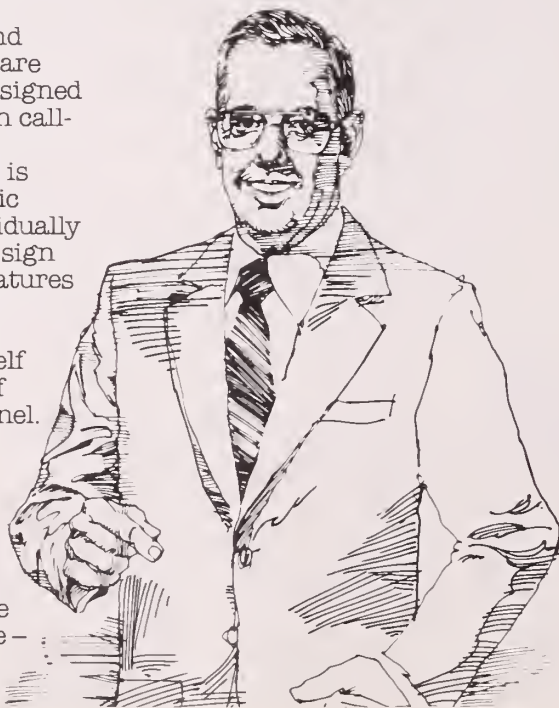
You might even be able to use an accurate evaluation of your company's present and future communication needs – at no cost to you.

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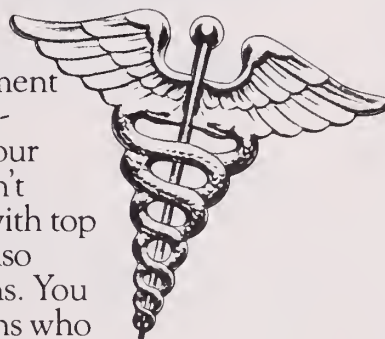
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of the Oklahoma State Medical Association

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Footnotes, bibliographies, and legends for illustrations should be submitted on separate sheets, double-spaced. Bibliographies should follow in order of: name and author, title or article, name of periodical with volume number, page and date of publication. These references should be numbered in the sequence in which they appear in the article.

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NEWS

Members of the Oklahoma State Medical Association, the constituent societies of the association, and all readers in general are invited to supply news items of general interest to the profession.

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All advertising copy must be approved by the Editorial Board before acceptance for publication. General and miscellaneous advertising rates will be sent on request.

EDITING SERVICE

The Editorial Board reserves the prerogative to submit contributions to a Medical Editing Service when warranted. If such is felt necessary, the Editor will contact the author for approval, informing him that there will be a modest charge for this service.

REPRINTS

Authors will receive reprint order forms from the Transcript Press, P.O. Drawer 1058, Norman, Oklahoma 73070, prior to final publication of their articles. Other requests for reprints must be made to the Transcript Press within 30 days after publication.

BACK ISSUES

Microfilm copies of back issues of *The Journal* may now be purchased from University Microfilms International, 300 North Zeeb Road, Ann Arbor, Michigan 48106.

OKLAHOMA STATE MEDICAL ASSOCIATION

You = Candle Power

It was a hot, humid 93° day last summer when I sat down at my typewriter in an effort to summarize my thoughts for this first article. I wished for a grandiose style of prose that might lift and stir your imagination, but lofty thoughts escaped my consciousness like wisps of clouds skirting across the sky on a stormy afternoon. I toyed with several approaches and then as my fingers moved across the keyboard, I sensed a new emotion and I was on my way sprinting, struggling to cross the finish line.

As my mind drifted, it occurred to me that I had long been inspired by the motto of the Christophers, a Christian organization that believes in the positive power of the individual. Simply stated it says, "It is better to light one candle than to curse the darkness"; expanding further, "I am only one, but what I can do I should, for without my efforts, it may never be done." To some of you, this might border on omnipotent thinking, but if you'll examine it closely, you'll recognize the importance of the statement.

We all inhabit our personal microcosm and often tend to isolate ourselves for one reason or another; most likely because it is here we are safe and less threatened. But, most of us are caring individuals who want to participate in enhancing our own environments and thus, those around us. With this thought in mind, it became easy for me to carry this concept a step further and

apply it to me and my fellow auxiliaries. An auxilian is a helper, one who accomplishes tasks that need to be done. But, achieving entails commitment, pledging one's time and effort to accomplish projects that need solving. Commitment makes accomplishing the impossible, possible. As volunteers, if we make time for auxiliary high on our priority list, "we doctors' spouses have the knowledge and experience to do better than our counterparts anywhere on earth when it comes to improving the quality of life and health in our communities," so says Betty Payne, our new national president. Betty knows first hand what she is talking about because she logged untold hours as a volunteer in numerous organizations, but her first love has always been to the medical auxiliary and we as an organization have benefited greatly by her expertise and that of thousands of other auxiliaries like her. National offers us a choice of over 900 Service Projects to choose via the Project Bank. Categories include programs for the Aging, Children and Youths, Health Education, Screening, Safety, Family Life and many more. Should none of these projects fit your individual community, I challenge your imagination to create others; there is no limit to what you can accomplish when hearts and hands are engaged.

YOU can improve the world; let's each of us light our candle and flood Oklahoma with the light of personal caring. *Betty Edge, President*

William G. Bernhardt, MD, of Midwest City, has been elected 1982-83 president of the Oklahoma Academy of Family Physicians. The primary purpose of the academy is to promote and maintain high standards of family practice in Oklahoma. The ultimate goal of the organization is to provide accessible, competent, caring, affordable and supportive medical care to Oklahoma residents. The organization has a membership of 1,000 physicians.

The American Association for the Advancement of Medical Instrumentation is sponsoring a conference on infusion technology and therapy on September 29-30 at the Hyatt Regency Crystal City, Arlington, Virginia. The purpose of the conference is to exchange information aimed at advancing the safe and effective use of infusion therapy and technology while at the same time holding down its costs. Information on the conference program and on registration and lodging may be obtained from Phyllis Freedman, AAMI, 1901 N Ft. Myer Drive, Suite 602, Arlington, Virginia, 22209, (703) 525-4890.

The Joint Commission on Accreditation of Hospitals (JCAH) has appointed Daniel R. Longo, ScD, director of its multihospital systems project. The purpose of the project is to develop effective means to monitor and improve patient care within multihospital systems. Before joining the JCAH, Dr Longo was a consultant for the American Hospital Association's Center for Health Promotion,

where he researched and analyzed the impact of multihospital systems on the delivery of medical services.

The National Heart, Lung, and Blood Institute has available a new publication titled *Arteriosclerosis 1981: Report of the Working Group of the National Heart, Lung, and Blood Institute*. This two-volume report reviews the progress made in arteriosclerosis research, prevention, and education and gives recommendations for future research. Single copies may be obtained by writing to Public Inquiries and Reports Branch, Box AT, National Heart, Lung, and Blood Institute, Building 31, Room 4A21, Bethesda, Maryland 20205.

Physician impairment and its effect on patients, families, and colleagues is the subject of the American Medical Association's Fifth National Conference on the Impaired Physician set for September 22-25 in Portland, Oregon. The meeting is co-sponsored by the Oregon Medical Association and the Multnomah County Medical Society and will be held in the Portland Marriott. The conference will bring together experts in the field to share their experiences and discuss individual and collective responsibilities for caring for disabled doctors.

The OSMA Board of Trustees will meet Sunday, September 12, 1982, at OSMA headquarters in Oklahoma City. This will be the first meeting of the Board of Trustees since the OSMA annual meeting in May. □

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Precautions: General: Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with

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Bactrim may prolong prothrombin time in those receiving warfarin, reassess coagulation time when administering Bactrim to these patients.

Pregnancy: Teratogenic Effects: Pregnancy Category C. Because trimethoprim and sulfamethoxazole may interfere with folate acid metabolism, use during pregnancy only if potential benefits justify the potential risk to the fetus.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. **Blood dyscrasias:** Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. **Allergic reactions:** Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. **Gastrointestinal reactions:** Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea, pseudomembranous colitis and pancreatitis. **CNS reactions:**

Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. **Miscellaneous reactions:** Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L E phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for infants less than two months of age.

URINARY TRACT INFECTIONS AND SHIGELLOSIS IN ADULTS AND CHILDREN, AND ACUTE OTITIS MEDIA IN CHILDREN

Adults: Usual adult dosage for urinary tract infections—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days. Use identical daily dosage for 5 days for shigellosis.

Children: Recommended dosage for children with urinary tract infections or acute otitis media—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. Use identical daily dosage for 5 days for shigellosis.

For patients with renal impairment: Use recommended dosage regimen when creatinine clearance is above 30 ml/min. If creatinine clearance is between 15 and 30 ml/min, use one-half the usual regimen. Bactrim is not recommended if creatinine clearance is below 15 ml/min.

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PNEUMOCYSTIS CARINII PNEUMONITIS:

Recommended dosage: 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.

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1. Rubin RH, Swartz MN: *N Engl J Med* 303:426-432, Aug 21 1980. 2. Data on file, Medical Department, Hoffmann-La Roche Inc.

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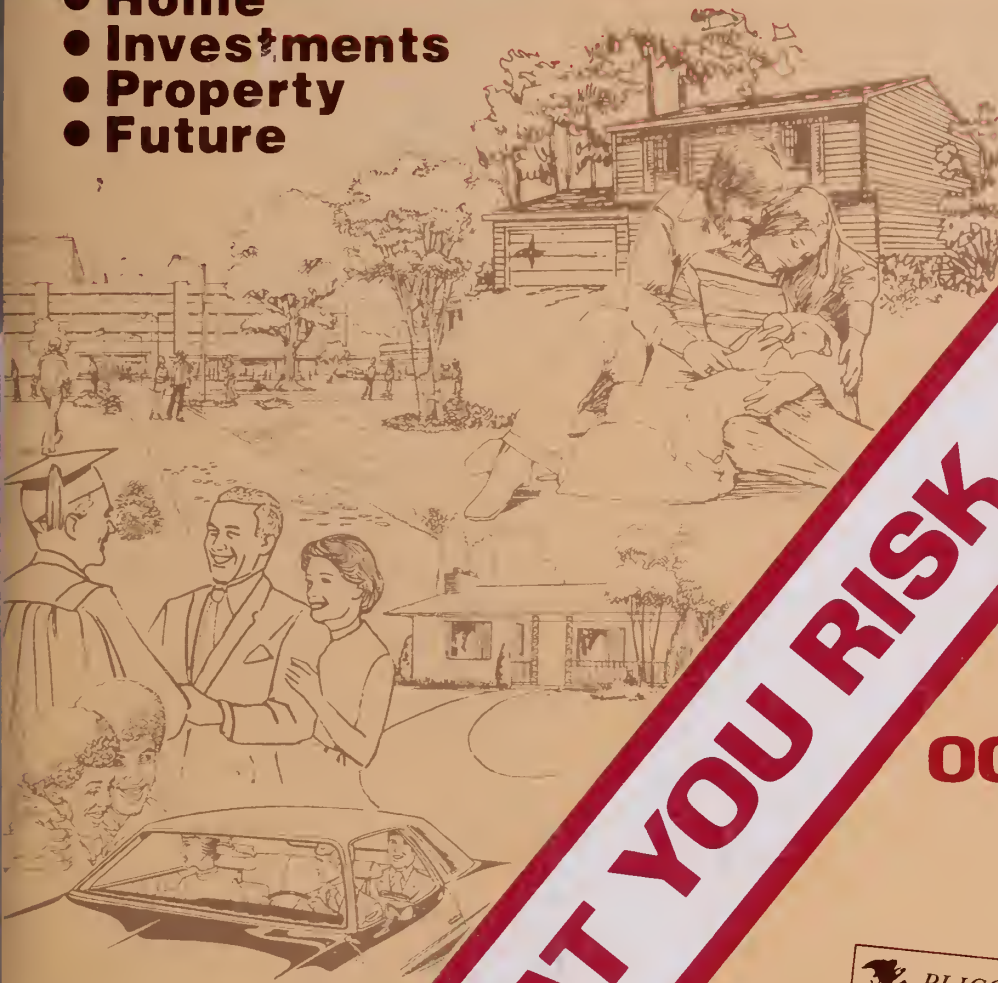
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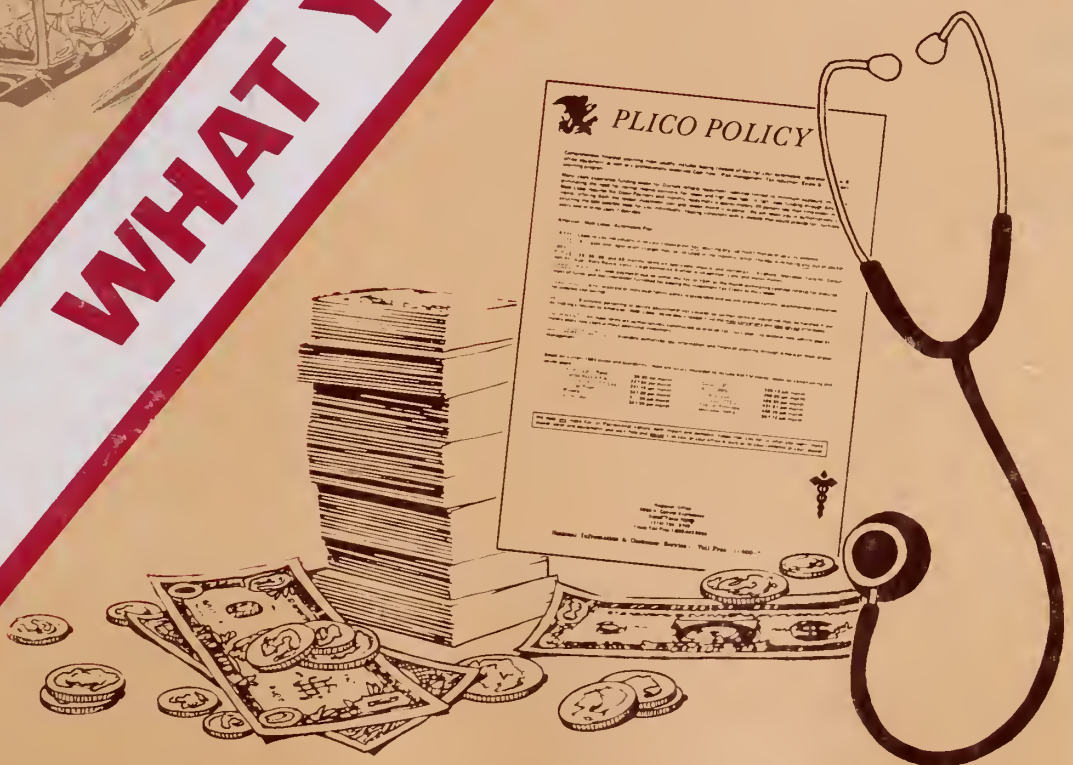
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JOURNAL

Oklahoma State Medical Association

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CARDIAC FAILURE. In congestive heart failure, inhibition with beta-blockade carries the potential hazard of further depressing myocardial contractility and precipitating cardiac failure. In patients already receiving digitalis, propranolol may reduce the positive inotropic action of digitalis and may have an additive depressant effect on AV conduction.

IN PATIENTS WITHOUT A HISTORY OF CARDIAC FAILURE, in rare instances, cardiac failure has developed during propranolol therapy. At the first sign of impending cardiac failure, patients should be fully digitalized and/or given a diuretic, and observed closely a) if cardiac failure continues, despite adequate digitalization and diuretic therapy, propranolol should be immediately withdrawn, b) if tachyarrhythmia is being controlled, patients should be maintained on combined therapy and closely followed until threat of cardiac failure is over

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction following abrupt discontinuation of Inderal therapy. Therefore, when discontinuance of Inderal is planned the dosage should be gradually reduced and the patient carefully monitored. In addition, when Inderal is prescribed for angina pectoris, the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If Inderal therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute Inderal therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease, who are given propranolol for other indications.

IN PATIENTS WITH THYROTOXICOSIS, possible deleterious effects from long term use have not been adequately appraised. Give special consideration to propranolol's potential for aggravating congestive heart failure. Propranolol may mask the clinical signs of developing or continuing hyperthyroidism or complications and give a false impression of improvement. Propranolol should be withdrawn slowly, since abrupt withdrawal may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

IN PATIENTS UNDERGOING MAJOR SURGERY, beta-blockade impairs the ability of the heart to respond to reflex stimuli. Except in prechromocytoma, propranolol should be withdrawn 48 hours prior to surgery. In case of emergency surgery, the effects of propranolol can be reversed by administration of beta-receptor agonists such as isoproterenol or levaterenol, but such patients may be subject to protracted severe hypotension. Difficulty in restarting and maintaining the heart beat has been reported.

IN PATIENTS PRONE TO NONALLERGIC BRONCHOSPASM (e.g., CHRONIC BRONCHITIS, EMPHYSEMA), administer with caution, since propranolol may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta-receptors.

DIABETICS AND PATIENTS SUBJECT TO HYPOGLYCEMIA. Propranolol may prevent the appearance of premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia, especially in patients with labile diabetes. A precipitous elevation of blood pressure may accompany hypoglycemic attacks.

USE IN PREGNANCY. Safe use in human pregnancy not established. Embryotoxic effects have been seen in animals at doses about 10 times the maximum recommended human dose.

PRECAUTIONS

Patients receiving catecholamine depleting drugs such as reserpine should be closely observed if propranolol is administered, since it may occasionally produce hypotension and/or marked bradycardia resulting in vertigo, syncopal attacks, or orthostatic hypotension.

Observe laboratory parameters at regular intervals. Use with caution in patients with impaired renal or hepatic function.

ADVERSE REACTIONS

Cardiovascular: bradycardia, congestive heart failure, intensification of AV block, hypotension, paresthesia of hands, arterial insufficiency, usually of the Raynaud type, thrombocytopenic purpura, Central Nervous System: lightheadedness, mental depression manifested by insomnia, lassitude, weakness, fatigue, reversible mental depression progressing to cataplexy, visual disturbances, hallucinations, an acute reversible syndrome characterized by disorientation for time and place, short term memory loss, emotional lability, slightly clouded sensorium and decreased performance on neuropsychometrics. **Gastrointestinal:** nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis. **Allergic:** pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress. **Respiratory:** bronchospasm. **Hematologic:** agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura. **Miscellaneous:** reversible alopecia. **Oculomucocutaneous reactions** involving the skin, serous membranes and conjunctivae reported for a beta-blocker (practolol) have not been conclusively associated with propranolol. **Clinical Laboratory Test Findings:** Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

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Reference: 1. Freis, E. D. Hypertension (Suppl. II) 3:230 (Nov-Dec) 1981

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I keep reading about "a more efficient system of health care delivery" and I keep wondering whatinhell it is. All I can learn — through divination and extra-sensory perception — is that it is a wondrous new way to take care of the health of folks and something everybody ought to be looking for.

I really don't know whether health care is the same thing as sick care or whether doctors and nurses and hospitals are supposed to be delivered to those who need such care or *vice versa*.

I do know what "more efficient" means, and I figure that's the most important part of the deal anyhow. More efficient like, "The new postal service will operate in more efficient ways than the old post office department could." And as in, "The operation of Amtrak will be much more efficient because of the centralized management concept."

Now the "system" part, I'm a little hazy about. I do recall that somebody described our present system for taking care of sick folk as "a cottage industry," so I feel sure it's not a system. Maybe it's like the system used to compute and pay our taxes or maybe like our judicial system or the system employed to make Social Security such a good deal, or something like that.

As you can see, I'm not at all sure that I understand what is meant by a more efficient system of health care delivery, but I don't need to. I won't ever be asked to look for it

because I practice medicine instead of health care delivery and that automatically disqualifies me from being a member of the search party. It seems that the only people who can be members are medical experts like politicians, bureaucrats, health ministers, consumers, retired persons, executives of insurance companies, labor unions and big corporations.

Unqualified as I am — and uncertain as I am about the meaning of a more efficient system of health care delivery, I'm going to volunteer a couple of quick suggestions for the posse of experts.

First, don't let the feds fool around with the system or the delivery trucks. The results would make Amtrak, the postal service and Social Security look like near successes.

Second, don't let sick people get involved in the health care system. They always need doctors and hospitals and nurses and medicines and operations and other expensive stuff. Besides, they always get upset if they don't get a lot of individual attention and personal service that can't be mass produced, pre-packaged or sent out in a pick-up truck. That's why sick care can't be manufactured or delivered efficiently.

Once these simple adjustments are made, I believe we finally will have found a more efficient system of health care delivery and all those experts can quit the search. Then except for sick people who need *medical* care, we got no problem.

—MRJ

Medical students are at most apathetic and often antagonistic toward organized medicine in general. Their exposure to the Oklahoma State Medical Association and the American Medical Association seems to have been primarily that of news reports and other mass communication efforts to denigrate these organizations, chiefly from factors relating to the cost of medical care and its ancillary services. These students know little or nothing about the benefits to members of these federations, to say nothing of the enormous assistance given to the public at large and to the preservation of quality medical care to the state and nation. This hiatus in the students' knowledge of the profession they are entering is a long standing and continuing fact, and appears to represent a lack of communication between our association and the medical student body.



The Council on Professional and Public Relations, under the chairmanship of M. Joe Crosthwait, MD, has initiated a program for the coming medical school year to improve our communications and relationships with the medical students. With the expert aid of Anita H. Delaporte, associate Director of the OSMA, medical school faculty representatives and members of the medical school student body, a series of roundtable discussions dealing with aspects of organized medicine not usually dealt with in the medical school curriculum has been arranged during the next several months. The format will be that of luncheon in a reserved section of the Faculty House, with each session limited to twenty students. Discussions will be led by members of the OSMA and selected lay

people who are experts in the field of discussion. Six of these luncheon-discussions have been scheduled, the first in September and the last in April. On August 20, OSMA was host for a picnic at Will Rogers Park in Oklahoma City, to which all the first-year students and their families were invited, as well as the OSMA officers, roundtable discussion leaders, speciality society representatives and the deans of the medical schools. A large group of those invited was present at that event, and it was felt that a very good beginning for this series was accomplished.

Although many medical students come from medically oriented families and backgrounds, the majority do not. As these students now enter their truly professional careers, their exposure to professional education, quality medical care and concern for humanity can be enhanced by increasing their knowledge and understanding of organized medicine and its mission. All medical practitioners are aware of the many day-by-day, nuts and bolts, economic, political, social and professional distractions with which they must deal, in addition to their primary concern of patient care. The chief mission of the OSMA continues to be the education of its members, and this must certainly include the dissemination of information which can be of help to the member in his pursuit of professional and career excellence, and the fulfillment of his life goals. If we, as an organization dedicated to these objectives, can instill in our beginning students a portion of this knowledge, we will have added to their future in medicine.

And who knows! We might even enroll some new members for the OSMA!

John A. Montoya MD

Shigellosis Surveillance in Oklahoma: Ten-Year Review, 1971-1980

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In the State of Oklahoma, shigellosis surveillance has been maintained for more than a decade by the Oklahoma State Department of Health. Oklahoma shigellosis data from 1971-1980 were reviewed and analyzed to determine the existence of epidemiologic patterns of the disease in the state.

INTRODUCTION

Shigellosis, an intestinal infection and a term often used synonymously with bacillary dysentery (a more severe form of the disease) constitutes one of the major enteric disease problems in the United States. For the period 1964-1973, 105,832 isolations of shigella were reported to the Center for disease Control (CDC) through the nationwide Shigellosis Surveillance System,¹ while from 1975-1979, 85,422 cases of shigellosis were reported for the United States.²

Although the intestinal manifestations of shigellosis can be severe, unusual extraintestinal occurrences of the disease in recent years such as prostatitis, conjunctivitis and ethmoiditis, childhood vulvovaginitis, orbital inflammation and acute urticaria-angioedema have been reported.³⁻⁷ Shigellosis and other enteric diseases (hepatitis, amebiasis, and giardiasis) have been observed by Drusin⁸ to be endemic among homosexuals in some areas of the United States. Dritz and Back⁹ reported that 60% of patients with shigellosis seen in San Francisco in 1975 were young homosexual males. Levine¹⁰ and colleagues have reported long term (>1 year) carrier states among patients with shigella organisms. The transmission of shigella organisms is through the fecal-oral route. Day care centers, nursery schools, and custodial institutions provide opportune settings for rapid spread of the disease agent. In addition, common-source outbreaks occur through water and contaminated food.

Although much has been written on shigellosis in the United States, little has been written on the epidemiologic patterns of the disease. Reports from CDC^{11, 12} and studies by Rosenberg¹ et al, and Reller¹³ and his colleagues revealed that children under 10 years of age were at greatest risk for shigella infections; that more females were affected than males; that shigellosis was characteristically a

disease of late summer and early winter; and that *Shigella sonnei* was the most predominant serotype isolated.

Since the state of Oklahoma has required the reporting of shigellosis for over a decade, it is the purpose of this paper to report an epidemiologic description of the disease and to resolve any resulting epidemiologic patterns.

METHODS AND PROCEDURES

For over ten years, the Oklahoma State Department of Health has endeavored to monitor all isolations of shigella in the state. It has done this by supplying physicians, hospitals, county and state microbiology laboratories all over the state with physician and laboratory communicable disease case report cards. Using these reporting forms, diagnoses of shigellosis confirmed by laboratory isolations of shigella were reported to the Epidemiology Service of the State Department of Health. The patient from whom shigella was isolated was identified by name, age, sex, race, place of residence and county where the microorganism was isolated. The serotype, source, and date of isolation were also reported. The reported isolations were screened for duplications and compiled for

quarterly reports to CDC by the epidemiology service of the State Department of Health. Included in the preceding methods of reporting were isolations from common-source outbreaks investigated by the state epidemiology service and local health officials.

Raw data from these reports, stored at the State Department of Health, were reviewed and analyzed for the years 1971-1980.

RESULTS

During the period 1971-1980, 2,346 human shigella isolations in Oklahoma were reported to the Oklahoma State Department of Health. This represents an annual mean of 234.6 isolations. Table 1 shows the incidence rates of shigella isolations in Oklahoma by year, from 1971-1980. Figure 1a represents graphically, incidence rates of shigella isolations from 1971-1980. It would appear from these data that there was a period cyclicity of three years, 1972, 1975, and 1978. Although the study period was from 1971-1980, it was of interest to determine if there was a peak prior to 1971 (1969), and another in 1981. Data from these two years can be seen in Figure 1b. Data relative to shigella isolations prior to 1971 were sparse. However, based on 72 isolations for 1969, there was no indication of a peak year. Data for 1981 were available for only the first six months of the year and based on 113 isolations,¹¹ a period peaking was again not observed.

As depicted in Table 2, young children were affected more than adults, and infants and

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Table 1
Shigella Isolations in Oklahoma
Reported to the
Oklahoma State Department of Health
by Year, 1971-1980

Year	Population *	Number	Rate/100,000
1971	2,607,000	100	3.8
1972	2,639,000	254	9.6
1973	2,667,000	206	7.7
1974	2,697,000	191	7.1
1975	2,728,000	340	12.5
1976	2,771,000	182	6.6
1977	2,805,000	95	3.4
1978	2,843,000	416	14.6
1979	2,892,000	307	10.6
1980	3,025,266	255	8.4
TOTAL		2,346	

*Source: Current Population Reports, Series p-25, #459 and # 875, US Department of Commerce, Bureau of the Census.

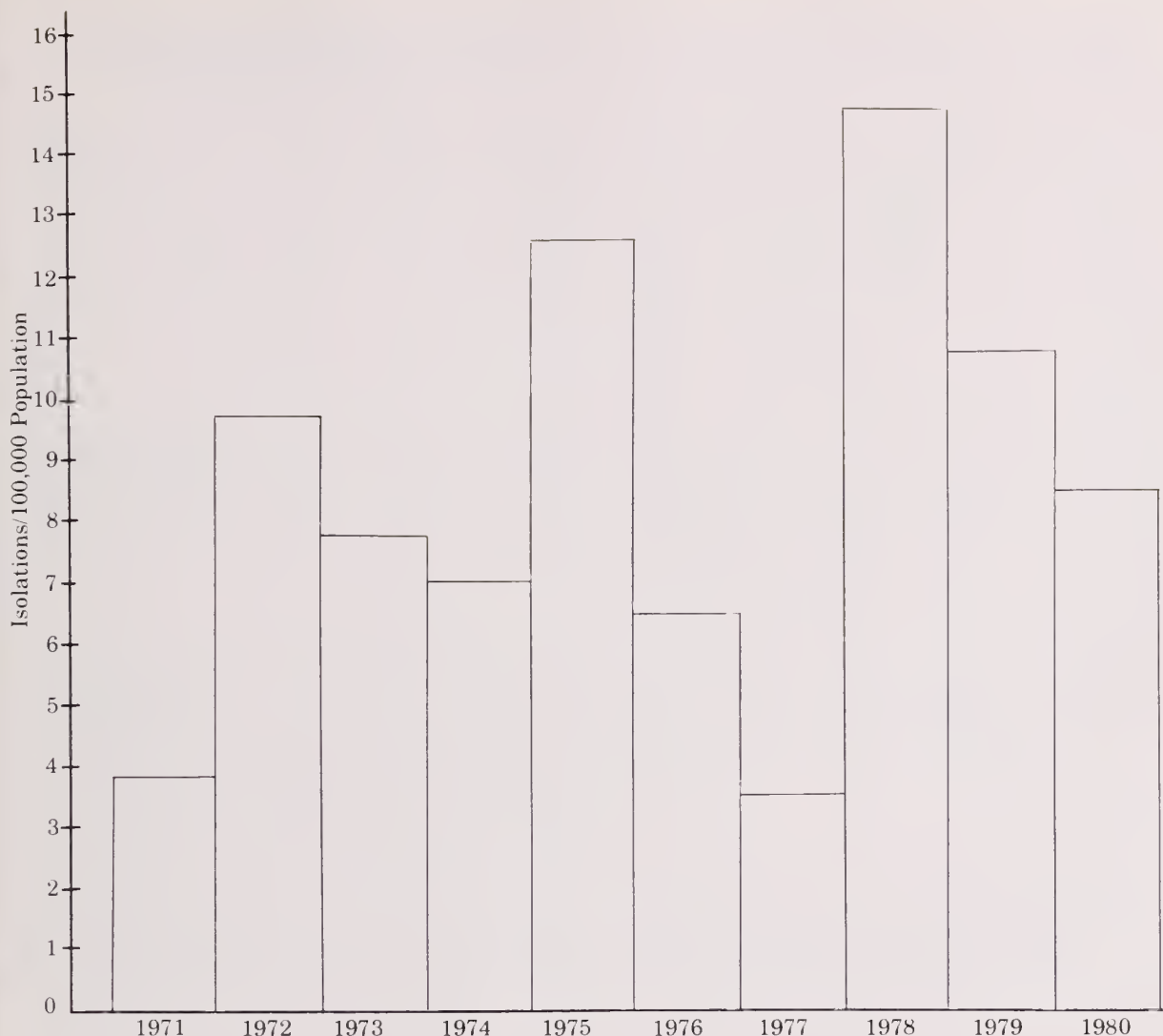


Fig 1a
Shigella Incidence Rates in Oklahoma, 1971-1980

children under five years of age accounted for 630 (26.8%) of the total isolations reported. The age group 1-4 years accounted for 526 isolations (22.4%), the highest reported for any age group in this study. Although the data showed a steady decline in the percent of isolations with increasing age to 64 years, there was a slight increase in the 65-74 years age group. Over the age 75 years, there were only 14 isolations accounting for 0.6% of the total, which was the lowest reported for any age group. The age of persons from whom shigella organisms were isolated ranged from newborn to 82 years of age. Among females, 846 isolations (36.1%) were obtained, while males accounted for 741 (31.6%) reported isolations. There were 759 isolations (32.3%) from whom sex was not de-

signed. Figure 2 represents graphically the age and sex distributions of persons in Oklahoma from whom shigella organisms were isolated.

The frequency of monthly shigella isolations for the ten-year period shown in Table 3 did not reveal consistent peaking of isolations for any single month. However, by comparing the mean number of shigella isolates for each of the months over the ten-year period (mean of January 1971-1980, mean of February 1971-1980 etc), and using analysis of variance (ANOVA), a statistically significant association was observed between the mean number of shigella isolates and individual months in which shigella was isolated (ANOVA - $p < 0.05$). When the mean number of isolates for

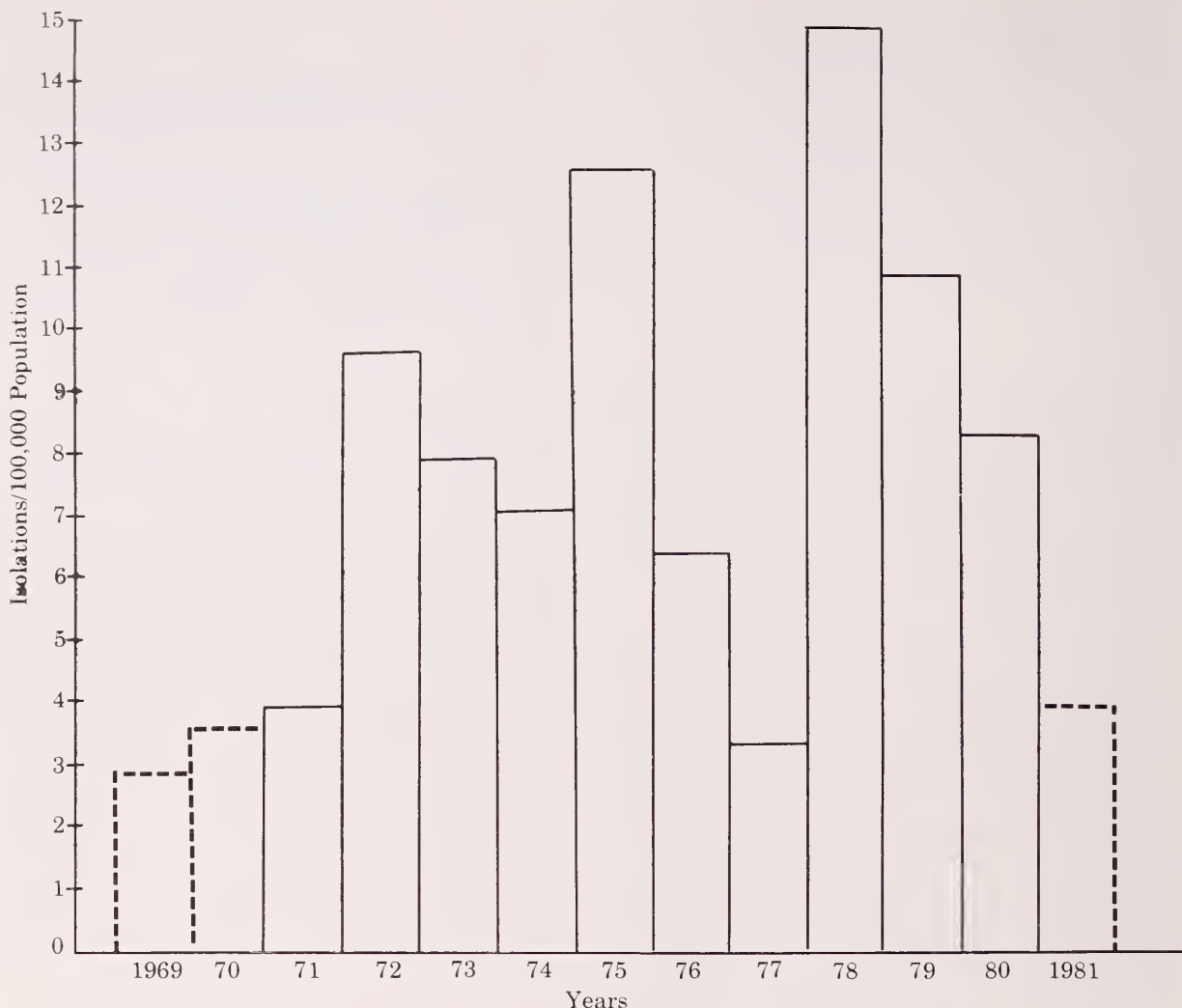


Fig 1b
Shigella Incidence Rates in Oklahoma, 1969-1981

the first six months of the study period was compared to the second six months, there was a significant difference in the means (the second six months showed a difference of 66.11 isolations). Continuing the search for seasonal trends, the monthly isolations for the study period were stratified into quarterly isolations with January, February and March representing the first quarter. (Table 4) By comparing the quarterly isolation rank totals, a statistically significant difference in isolation between the ranks was observed in the fourth quarter (October, November and December) followed by the third quarter (July, August and September).

Data for the entire year of 1973 were not used in the above analyses since 77% (159) of the total isolates that year were not designated

as to month of isolation. The few undesignated isolations for other years also were not used in the statistical calculations. Figure 3 represents monthly distribution summary of shigella isolations in Oklahoma from 1971-1980. By comparing the total monthly isolates over the ten-year period, it was evident that December had the highest number followed by August and September.

Information relative to the frequency of shigella isolations obtained from each Oklahoma county by year was analyzed. Using arbitrarily those counties in which 20 or more isolations were reported, incidence rates of isolations were recorded in Table 5. Garfield county reported the highest rate, 199/100,000 population, followed by Tulsa, Oklahoma and Cleveland counties. By comparing these rates,

Table 2
Age-Sex Distribution of Persons in Oklahoma
From Whom Shigella Organisms Were
Isolated, 1971-1980

Age Group (Years)	Male	Female	Sex Unknown	Total	Percent of Total
<1	55	48	1	104	4.4
1-4	268	250	8	526	22.4
5-14	158	150	6	314	13.4
15-24	48	78	6	132	5.6
25-34	24	64	4	92	3.9
35-44	6	16	1	23	1.0
45-54	8	12	1	21	0.9
55-64	5	11	—	16	0.7
65-74	9	16	—	25	1.1
75 & over	5	9	—	14	0.6
Age unknown	155	192	732	1,079	46.0
Total	741	846	759	2,346	100.0
Percent	31.6	36.1	32.3		100.0

most of the shigella isolations apparently were concentrated in the central and northeastern counties of the state.

Of the 2,346 isolations of shigella reported to the Oklahoma State Department of Health during the study period, only 56.7% (1,331) were identified by species. Among them, *Shigella sonnei* (group D) accounted for 81.7% (1,088). *Shigella flexneri* (group B) accounted for 16.6% (221), while *Shigella boydii* (group C), and *Shigella dysenteriae* (group A) respectively accounted for 1.1% (15) and 0.5% (7) of the identified species. (Table 6)

It was of interest, despite the numerous ex-

Table 4
Shigella Isolations in Oklahoma by Quarters,
1971-1980*

Years	Quarters			
	1	2	3	4
1971	26	10	27	34
1972	14	22	77	141
1974	27	39	63	53
1975	139	28	102	71
1976	66	67	30	17
1977	7	10	31	47
1978	25	110	110	171
1979	49	40	84	134
1980	45	43	97	70

*None of the data for 1973 were used in the analysis because of the large proportion of unknowns. The few unknowns from other years were also eliminated from the analysis.

Friedman Chi Square: $X^2_r = 8.899$, 3df., $p < 0.05$

traintestinal sources of infection reported by others that the only documented source of shigella isolations in Oklahoma during the study period, was from human feces.

DISCUSSION

Since the Oklahoma shigellosis surveillance is based on voluntary reports of shigella isolations, the number of isolates reported by this surveillance system likely represents only a fraction of the total number that actually occur. The probability of shigella isolation reports reaching the State Department of Health

Table 3
Shigella Isolations in
Oklahoma by Months, 1971-1980

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unk. Mon	Total
1971	15	9	2	2	7	1	4	11	12	13	5	19		100
1972	1	4	9	3	10	9	24	33	20	63	34	44		254
*1973	11	1	3	4	4	9	3	2	2	6	1	1	159	206
1974	12	13	2	12	15	12	12	21	30	12	24	17	9	191
1975	103	17	19	9	7	12	29	42	31	12	15	44		340
1976	15	9	42	34	28	5	9	10	11	5	1	11	2	182
1977	3	3	1	7	3	—	7	7	17	14	11	22		95
1978	13	6	6	55	32	23	30	33	47	45	51	75		416
1979	11	15	23	5	19	16	15	36	33	34	46	54		307
1980	10	16	19	17	10	16	31	37	29	21	14	35		255
Total	194	93	126	148	135	103	164	232	232	225	202	322	170	2,346

*None of the data for 1973 were used in the analysis because of the large proportion of unknowns. The few unknowns from other years were also eliminated from the analysis.

ANOVA: $F = 2.45$, df. 11,88; $p < 0.05$



Fig 2
Age/Sex Distribution of Persons in Oklahoma
From Whom Shigella Organisms
were Isolated, 1971-1980.

depends considerably on the interest and motivation of the reporting agency. The quality of data reported depends on how meticulously the communicable disease case report cards are completed by physicians and laboratory technologists.

Despite the limitations, the present study has provided a new insight in the epidemiology of shigellosis in the state. From the results, a three-year period cyclicality of shigella isolations in Oklahoma is evident. The incidence of shigella isolations revealed peak incidences in 1972, 1975, and 1978. To investigate this cyclic trend further, incidences of shigella isolations were observed prior to 1971 and for 1981. The rates of isolations prior to 1971 were calculated using the Oklahoma population and reported shigella isolations for these years. Although the expected peak for 1969 was not observed (Figure 1 b), data at that time were relatively sparse. Furthermore, if the cyclic trend was real, there should have been a peak in isolations in 1981; however, the data for 1981 were only available for the first six months of the year. At the present, it would be premature to draw conclusions about the 1981 isolation pat-

tern without the complete annual report. Since the data prior to 1970 would not be comparable to that collected afterward, speculation of period cyclicality can be determined only from 1981. It would be advantageous for the State Department of Health to look for consistent patterns in the future years. If such cycles are predictable, control of shigellosis could be enhanced.

The fact that 26.8% of the total shigella isolations occurred in persons less than five years of age substantiates the general observation that shigellosis is characteristically a disease of the young, specifically children less than five years old. The recognition of this age group as a high risk group is of public health importance. Since children within this age group have not yet acquired satisfactory hygienic habits, they can be a source of spread of infection at home, in day care centers and nursery schools. The higher frequency of isolation from females over 15 years of age compared to that of males of the same age can be explained on the basis that females are relatively in closer and prolonged contact with frank cases or subclinically infected children in whom the agent

is present. The isolations of shigella from among newborns is indicative of possible spread of infection from mother to offspring during childbirth. Population age stratification required to calculate age specific rates of shigella isolation was not available.

The observation of more frequent shigella isolations in the third and fourth quarters in Oklahoma is consistent with the CDC observation that shigellosis in the United States is a disease of late summer and early winter.¹ When monthly reports of the number of isolations were graphed, an August-September plateau, and December peak were evident. However, conclusions should be made with caution because the monthly distribution of shigella isolations can be influenced by the

time interval between the onset of the illness and actual isolation of shigella.

The shigella incidence rates for Oklahoma counties reporting 20 or more isolations during the study period were examined. The results revealed that Garfield, Tulsa, Oklahoma and Cleveland counties reported the highest rates of isolation. The high rates of isolations among these four counties possibly could be explained on the bases of a higher proportion of medical facilities, better awareness of reporting, the larger concentration of industrial and institutional complexes, the higher number of working mothers, the number of day care centers, and nursery schools. Some of these factors — particularly day care centers and nursery schools — may directly contribute to a higher

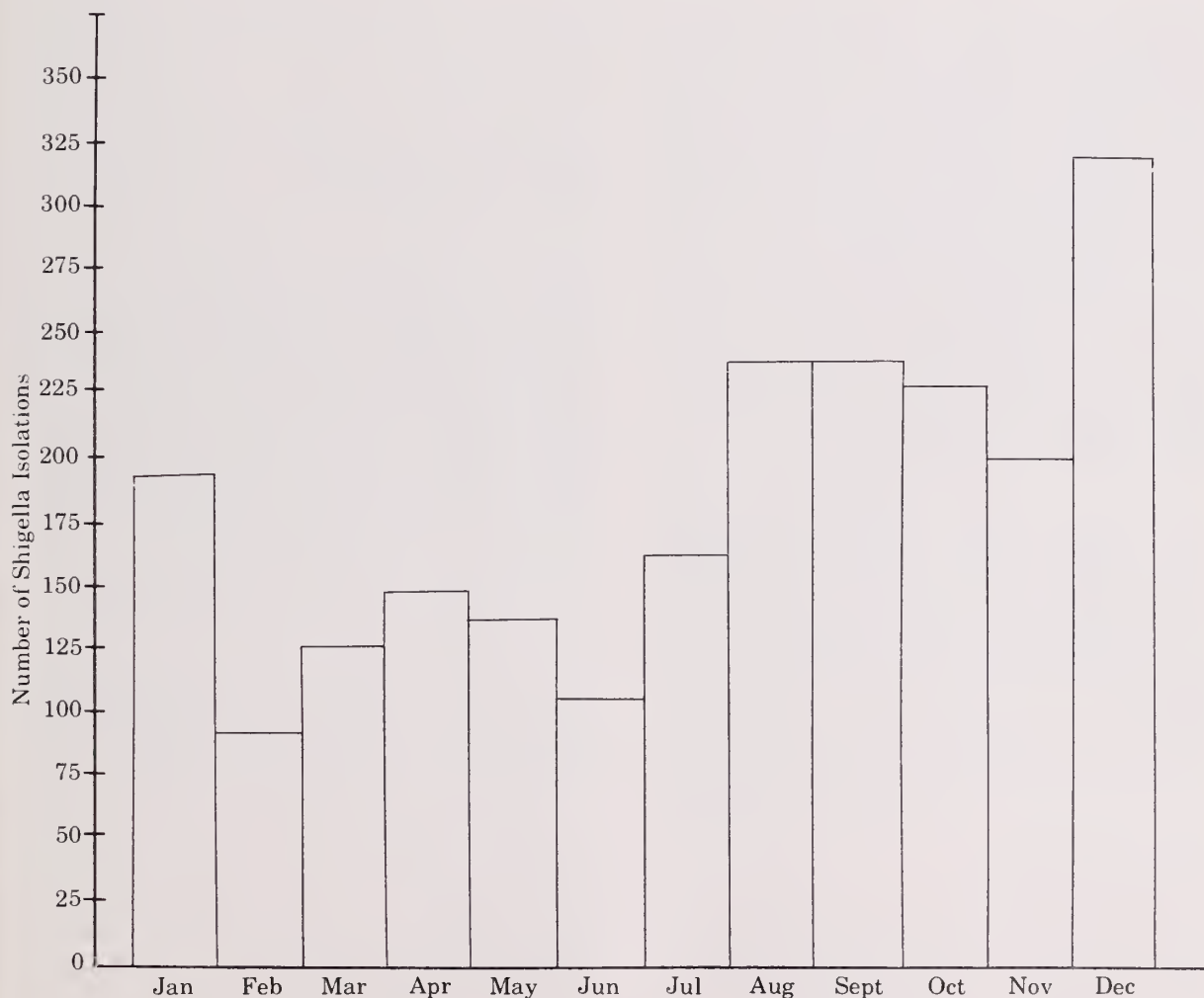


Fig 3
Monthly Distribution Summary of
Shigella Isolations in Oklahoma, 1971-1980

Table 5
Counties in Oklahoma Reporting
twenty or greater
Shigella Isolations, 1971-1980

Counties	1980 Population*	Number of Isolations	Percent of Total	Rate/ 100,000
Cleveland	133,173	117	5.0	87.9
Comanche	112,456	44	1.9	39.1
Creek	59,210	29	1.2	49.0
Garfield	62,820	125	5.3	199.0
Muskogee	66,939	51	2.2	76.2
Oklahoma	568,933	586	25.0	103.0
Pontotoc	32,598	22	0.9	67.5
Pottawatomie	55,239	31	1.3	56.1
Tulsa	470,593	691	29.5	146.8

*Source: 1980 Census of Population and Housing, US Department of Commerce, Bureau of the Census, March 1981.

probability of exposure of children to shigella infection.

The emergence of *Shigella sonnei* as the predominant species in Oklahoma is consistent with the CDC finding for shigellosis in the United States. However, no clear explanation for this phenomenon is apparent.

The complete analysis of data acquired from the reporting of disease cases is essential to determine epidemiologic descriptions and patterns. Only by thorough understanding of each disease can adequate control measures be initiated and only through a responsible, conscientious effort to make the reporting system work, can this end be achieved.

ACKNOWLEDGEMENT

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Table 6
Identified Serotypes of Shigella Isolations
in Oklahoma Reported to the
Oklahoma State Department of Health,
1971-1980

Year	Group A <i>S. dysenteriae</i>	Group B <i>S. flexneri</i>	Group C <i>S. boydii</i>	Group D <i>S. sonnei</i>	Total
1971	3	15	—	16	34
1972	—	4	1	92	97
1973	—	26	1	148	175
1974	1	11	—	76	88
1975	1	15	3	82	101
1976	1	6	1	38	46
1977	—	28	—	46	74
1978	—	73	4	288	365
1979	1	22	3	135	161
1980	—	21	2	167	190
Total	7	221	15	1,088	1,331
Percent of Total	0.53	16.60	1.13	81.74	100%

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PAIN IS NOT A DISABILITY

William N. Harsha, MD

The diagnosis in treatment of pain represents one of the physician's great challenges. The disability of pain can be only partially verified by objective scientific techniques. Understanding what the pain means to the patient and working with the patient to understand and modify his pain complaint affords the patient a more complete and successful treatment plan.

Pain is not a disability; only the reaction to pain may be disabling. A pain complaint is the most common reason a patient presents himself to a physician for diagnosis and treatment. To give the patient optimal care, the physician must not only find the cause of the pain and eliminate it; he must also help the patient understand his pain and the way that his body reacts to that pain. Pain is both a necessary and troublesome part of the human sensory experience. Pain response is necessary to provide the body with a feedback mechanism that warns of external threat or internal illness. The pain response is troublesome when the physiological warning has been acknowledged but the pain persists and combines the

psychological factors producing suffering . . . which can be termed an appropriate stress response. The intensity of the patient's pain complaint will be directly related to the intensity of the stress of the pain as the patient perceives it. The pain is a necessary warning signal that something isn't right with the body-mind complex. This warning signal, however, is regularly a threat or a concern to the patient — a concern that brings the patient to the physician.

Health care professionals describe two kinds of pain, acute and chronic. Acute pain is that which appears suddenly and has a predictable cause, a predictable length of time, and usually, a predictable cure. There are noxious stimuli producing acute pain which can be readily identified and removed. Acute pain is usually simple pain because complications seldom result from it. As a parallel, chronic pain can be called complicated pain because the longer duration of this type of pain often produces complications in the form of a wide range of emotions that represent the patient's unique reaction to this stress.

Reactions to Pain

A patient's reactions to pain stress increase in number and intensity the longer the pain persists. As complications continue reducing the individual's tolerance of pain, the patient's perception of pain increases as does the stress from it. The physician must remember that the

patient's perception of pain is more important than how the physician perceives it. Doctors often suggest that while they may have observed a particular pain experience many times in the past in their practices, the patient often is experiencing pain stress for the first time.

The body-mind response to a pain stress reaction may be mild or severe, but it always takes the same course, varying only in degree. It is a change from the familiar to the new and unfamiliar that parallels the anxiety attached to the pain stress response.

Denial

The typical patient's response to pain stress stimulus goes through several stages as follows:

1. denial
2. anger
3. depression

Denial is the attempt to correct a problem by pretending it doesn't exist. This is an immature, child-like approach in which we all engage. At this stage, the patient does not admit, either to himself or to others, that he feels frightened or threatened by the pain complaint. The patient, therefore, does nothing about it, ignoring it and wiping it from his con-

"The physician must remember that the patient's perception of pain is more important than how the physician perceives it."

scious view. Even when the patient sees a physician, it is usual for him to minimize the importance of the pain complaint.

The value of denial is that it allows the patient a brief period in which to become familiar with the new situation of the pain complaint. The denial only becomes pathological as it continues and prevents a patient from progressing through the stress reaction to its completion.

If denial persists, the doctor may become confused because the repressed anxiety increases the intensity of the patient's pain, lowering pain tolerance. The patient complains loudly of pain and in a very demanding way,

but shows very little personal distress. The doctor, in confusion, can refer to a patient as neurotic, hysterical or a malingerer. What is really happening is that the patient is going through a normal stress reaction and has become fixed in the first stage of denial. At this stage, beneficial treatment from the physician

" . . . Repressed anxiety increases the intensity of the patient's pain, lowering pain tolerance."

is allowing, even insisting, that the patient talk about his fears at as deep a level as the patient is capable. It is very difficult for many patients to understand and express their real feelings of anxiety and fear. It is at this stage that inappropriate administration of mind-altering chemicals which numb these feelings can and do prolong the denial phase.

Bargaining, compromising, argumentative and even demanding behavior is another part of the denial process that occurs in the initial superficial response to stress. This is an attempt to undo what has happened. It reflects the magic thinking of the child's mind which people carry into adulthood that is frequently used at this phase. The child believes a thought is the same as an act. A patient at this stage will often use the phrases "if only" and "before it happened, I was able to do" because they are attempting to undo the pain stress. Doctor shopping is common at this stage. The patient tries to reinforce his perception that he truly knows himself.

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Anger

The next stage of the pain stress reaction is anger or anger combined with depression. These are referred to as deeper or "gut" levels of defense. Anger is by definition a state of anxiety or tension and hostility when the expectation is frustrated or a goal is not achieved.

"Bargaining, compromising, argumentative and even demanding behavior is another part of the denial process . . ."

When a patient experiences pain, the expectation is that the doctor can remove the pain. If the pain is not diminished to the patient's satisfaction, anger results.

Anger is a normal response to stress, be it pain, change, or loss. Unfortunately, in this circumstance, most people were taught early in life to repress anger, especially toward authorities, because the accompanying behavior is not socially acceptable. Doctors in our society are seen as authority figures. Anger has more energy than any other feeling. When it is repressed, energy builds up and eventually produces depression or other psychological responses such as muscle tension, headache, etc. Some of the anger may escape repression and be expressed indirectly as teasing or joking or as maladaptive behavior such as martyrdom.

Another common method of indirectly dealing with anger is referred to as the passive-aggressive behavior in which a person does nothing or does the opposite of what is expected. Even some direct methods of expressing anger are destructive, such as blaming others, blaming self, seeking revenge, and vindictiveness. Revenge is a particularly destructive method of dealing with anger because it has a twofold effect. The patient suffers internally as he or she ruminates and then later causes suffering to others when he or she directs the force of his or her anger outwardly. Our legal system presents a vehicle through litigation to seek revenge in a socially acceptable way.

Depression, which is found as a loss of interest and frequently is described in part as lack of motivation on the patient's part, occurs when anger is repressed. This symptom lowers

pain tolerance more effectively than any other factor, increasing the patient's perception of pain. The doctor may now become confused and often angry because the patient's complaints of pain far outweigh his organic findings. If the doctor becomes too frustrated by this experience, he may attack or reject the patient or see the patient as neurotic or even as malingering. The doctor's attack causes the patient to respond with increased anger or other emotions of being hurt. This attitude of depression further lowers the tolerance of pain, and an ever-downhill spiral evolves. Thus the depression may deepen even to the point of suicide ideation.

A further breakdown of the doctor-patient relationship can occur when the patient sees his doctor as a "god-like" individual who can always produce what the patient wants. Along with this, the doctor's expectations of the patient are frequently frustrating because he expects the patient to recover when he, the doctor, treats the patient.

Pain Management

Appropriate management of pain stress reaction or any other illness is to allow the patient the opportunity to express anger and frustration over what he or she experiences. Encouraging the patient to vent his concerns,

"The value of denial is that it allows the patient a brief period in which to become familiar with the new situation of the pain complaint."

fears, and anger to an empathetic, understanding, nonjudgmental professional is a powerful therapeutic tool. The doctor needs to understand and accept his authority posture and encourage his patient to release such feelings. Patients who are allowed to talk about these feelings to an understanding listener can generally rid themselves of the distress in a few minutes and move on to the next stage in pain stress reaction without feelings of depression.

Pain stress reaction is diminished when a stage of acceptance by the patient is reached. At this point, the patient no longer denies what is happening, is not trying to undo the process,

and is, for all practical purposes, ready to face the reality and now wallow in anger, frustration, self pity, guilt, or depression. He is able to cooperate fully with the physician by putting energy into whatever treatment is indicated rather than tying up the energy in the self-defeating emotions of fear, anger, etc. If pain complaint, in fact, cannot be eliminated and the patient must learn to accept and cope with his pain, he can then accept the situation and

work on methods to raise his tolerance of pain. With an understanding of the chronic pain stress complaints, doctors can offer their patients active, productive lives and relieve patients of self-defeating behavior patterns and/or avoid the use of mind-altering chemicals or other diminishing therapies.

Pain is not a disability; only the reaction to pain may be disabling.

Doctors Medical Building, 5700 NW Grand Boulevard, Oklahoma City, OK 73112.

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Penicillin Allergy: Clinical Evaluation of Skin Tests

LEON HOROWITZ, MD

Benzylpenicilloyl-polylysine (PRE-PEN®) has been available for eight years but it is not widely used. This article reviews its application in the detection of penicillin allergy.

Since its introduction to general use after World War II, penicillin has been given in various forms by every conceivable route. With its widespread use, particularly in the past decade, there has developed an awareness of allergic reactions to penicillin.

Hypersensitivity to penicillin can manifest itself in a variety of ways, varying from a mild morbilliform rash of delayed onset to immediate, cataclysmic anaphylaxis and death.

Illnesses for which penicillin is frequently prescribed, particularly pharyngitis in children (both bacterial and viral), are capable of causing rashes which can be misinterpreted as a penicillin reaction. Consequently, many patients have been labeled as being allergic to penicillin who, in fact, are not.^{1,2}

Since its introduction in 1974, benzylpenicilloyl-polylysine, (BP) (PRE-PEN, Kremers-Urban), skin test antigen for penicillin allergy has not enjoyed wide use. The inclusion of the following statement in the package insert has probably dampened the enthusiasm that was expected.

There are insufficient data derived from well-controlled studies to determine the value of the PRE-PEN skin test as a means of assessing the risk of administering therapeutic penicillin (when penicillin is a preferred drug of choice) in the following situations.

- 1) *Adult patients who give no history of penicillin hypersensitivity.*
- 2) *Pediatric patients.*

In addition, there are no data at present to assess the clinical value of PRE-PEN where exposure to penicillin is suspected as a cause of a drug reaction and in patients who are undergoing routine allergy evaluation. Recognition that the following clinical outcomes are possible makes it imperative for the physician to weigh risk to benefit in every instance where the decision to administer or not to administer penicillin is based in part on a PRE-PEN skin test.

- 1) *An allergic reaction to therapeutic penicillin may occur in a patient with a negative skin test to PRE-PEN.*

- 2) *It is possible for a patient to have an anaphylactic reaction to therapeutic penicillin in the presence of a negative PRE-PEN skin test and a negative history of clinical penicillin hypersensitivity.*³

Evaluation of Skin Test

This study was undertaken to evaluate the safety and efficacy of skin testing with PRE-PEN in a population of atopic patients, some of whom said they were, and others who said they were not allergic to penicillin.

A notice was sent to patients asking for volunteers for a skin test for penicillin allergy. Those who agreed to be tested were asked to fill out a card giving pertinent historical information. The first 100 consecutive unselected patients scheduled for allergy skin testing for other reasons, who also volunteered for the penicillin study, were accepted. Those who had a history of overt anaphylactic reactions to penicillin were excluded because of the stated danger of an anaphylactic reaction to the test material.

Puncture tests were done on the volar surface of the forearm with:

- (1) Undiluted PRE-PEN; (2) a minor determinate mixture (MDM) which was a two-week old solution of potassium penicillin G diluted with sterile water to 100 u/ml; (3) freshly diluted benzypenicillin G (BP), 10,000 u/ml and (4) a control of sterile water for injection.

Tests were read in 15 minutes as (+) for a wheal over 5 mm with erythema over 15 mm;

Leon Horowitz, MD, received his medical degree from New York University School of Medicine. He is certified by the American Board of Pediatrics and its sub-board in Pediatric Allergy, as well as the American Board of Allergy and Immunology. Dr Horowitz is a Fellow of the American Academy of Pediatrics, the American Academy of Allergy and the American College of Allergists. A member of Phi Beta Kappa, he is also Clinical Associate Professor of Pediatrics at the Oklahoma University Tulsa Medical College, and Director of the Pediatric Allergy Clinic of the Tulsa Ambulatory Pediatric Center.

(±) for a wheal less than 5 mm and (−) for no wheal.

If the tests were negative, they were repeated by the intradermal method with the same materials and read in the same way.

Test Results

One hundred patients were tested. Fifty-six were male, of whom 17 were said to have penicillin allergy. Nine of the 44 females were said to be allergic to penicillin. Eighty-nine patients had received penicillin in the past; eleven were not sure.

No patient reacted to puncture tests. With the intradermal testing, of the 74 patients with a negative history, two were (+) to BP and two were (±) to BP, while of the 26 patients with a positive history only one was (±) to BP.

There were no untoward reactions to the skin tests.

Penicillin Action and Reaction

Antibiotic drugs, generally, are simple molecules of low molecular weight that are not antigenic in and of themselves. In order to be antigenic, they act as haptens which must first combine with a body protein carrier before being able to induce an antibody response. The problem is complicated by the fact that antibiotics are metabolized in vivo and metabolic products themselves may act as haptens.

Penicillin is produced by biosynthesis during the deep fermentation of the mold *Penicillium chrysogenum*. The basic structure is a 6-Aminopenicillanic acid, containing a thiazolidine ring, A, connected to a beta-lactam ring, B, to which is attached a side chain, R. (Fig. 1)⁴ This basic structure must remain intact for penicillin to express its biologic activity. Modification of the side chain, by the addition of chemicals or precursors during fermentation, causes alteration of antibacterial activity while allergenic capability remains intact. These altered penicillins are the

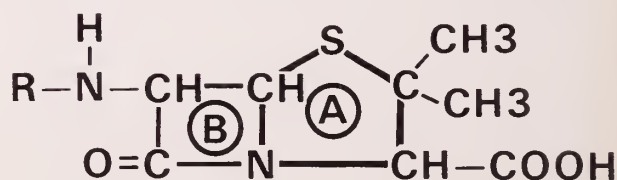
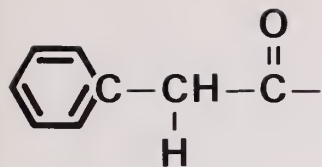
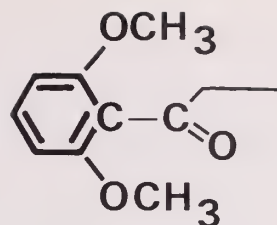


Fig 1. 6-Aminopenicillanic acid

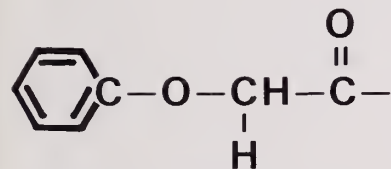


Benzyl penicillin (Pen G)

[Pentids, Bicillin, Crysticillin, Duracillin, Wycillin]

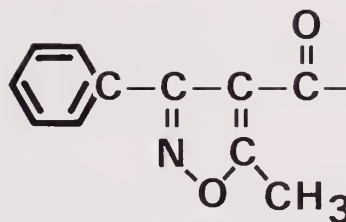


2,6 - Dimethoxyphenyl penicillin (Methicillin)
[Staphicillin]

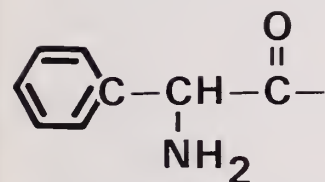


Phenoxymethyl penicillin (Pen V)

[Betapen-VK, Ledericillin VK, Pen-Vee K,
Pfizerpen VK, Robicillin VK, Uticillin VK,
V-Cillin K, Veetids]

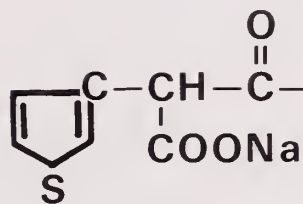


5 - Methyl-3-phenyl-4-isoxazolyl penicillin
(Oxacillin) [Prostaphlin]

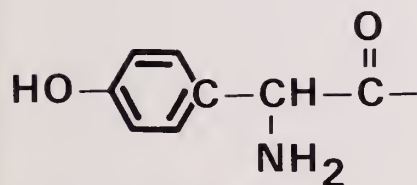


6 - Aminopenicillanic acid (Ampicillin)

[Amcil, Ampicillin, Omnipen, Pensyn, Pfizerpen A,
Polycillin]

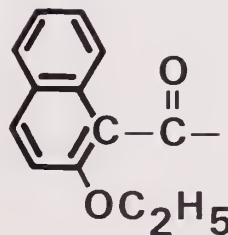


6 - Carboxy-3-thienylacetyl amino -3, 3-
dimethyl-7-oxo-4-thia-1-azobicyclo [3,2,0,
heptane-2-carboxylic acid penicillin
(Ticarcillin) [Ticar]



D - (+) - amino-p-hydroxybenzyl penicillin
(Amoxicillin)

[Amoxil, Larotid, Polymox, Robamox, Trimox, Wymox]



2-Ethoxy-1-naphthyl penicillin (Nafcillin)
[Nafcil, Unipen]

*Chemical name **Generic Name () #Trade Names[]

Fig 2. Modified side chains of penicillins.

"semi-synthetic penicillins." (Fig. 2) Penicillin G (benzylpenicillin) is the naturally occurring product of fermentation.

When Penicillin G is administered, it is rapidly absorbed and distributed throughout the body. Approximately 65% is reversibly bound to plasma albumin. Penicillin G is rapidly excreted from the body; with from

"Penicillin excreted in semen has caused penicillin reactions after intercourse in penicillin-allergic females."

60-90% being recoverable in the urine. The remainder is excreted in the bile and by other channels. Penicillin excreted in semen has caused penicillin reactions after intercourse in penicillin-allergic females. Approximately 90% of metabolized penicillin can react with the epsilon amino groups of lysine to form the benzylpenicilloyl grouping. This makes up the greatest proportion of penicillin metabolism and, thus, is known as the "major determinant." About 10% of the metabolic products include unaltered benzylpenicillin G, sodium benzyl penicillin G, sodium benzylpenicilloate, benzylpenicilloate, sodium alpha-benzyl penicillioyl-amine and possibly other, as yet to be determined, compounds. Collectively, these are known as the "minor determinants," because they make up only a small proportion of the metabolic products. This terminology is unfortunate because it appears that the "minor determinants" are responsible for most of the severe immediate anaphylactic-type reactions.

Anti-penicillin antibodies, of the IgM or IgG type, occur in more than 80% of individuals who have received penicillin, but these antibodies are not involved in acute allergic reactions.⁵ They may be related to some of the erythematous and maculopapular rashes and other delayed types of penicillin reactions. IgE antibodies to penicillin G or to minor determinants are responsible for immediate hypersensitivity reactions.

Penicillin reactions can be classified as immediate, accelerated or late reactions.

Immediate reactions may occur within seconds of exposure, but usually occur within 15-20 minutes. Symptoms may vary from diffuse intense pruritis with or without urticaria

to anaphylaxis with laryngeal edema and death.

Accelerated reactions usually occur from 30 minutes to 48 hours after administration and include diffuse flushing or urticaria and occasionally wheezing.

Delayed reactions starting more than 48 hours after administration are the most common form of reaction and usually present as rashes ranging from miliaria, in type, to chronic urticaria. On occasion, serum sickness (fever, urticaria and arthralgia) may develop. Other delayed reactions have been reported such as granulocytopenia or hemolytic anemia, glomerulonephritis, neuritis and carditis.⁶

IgE antibodies, responsible for immediate reactions, are skin sensitizing and may be detected by direct skin testing with penicillin G and PRE-PEN. There is no commercial preparation of the minor determinants. IgE antibodies may also be detected by radioallergosorbent testing (RAST).⁷

Because rashes of viral or bacterial origin have occurred in patients taking penicillin, many have inappropriately been labeled as "penicillin allergic." Of those so labeled, 85% have negative skin tests and have withstood challenge with penicillin.⁵ Among the 26 patients in this study who said they were allergic to penicillin, only one had a \pm test reaction.

Skin Test Summary

Skin tests with benzylpenicilloyl-polylysine (BP), minor determinant mixture and penicillin G were done on 100 patients being tested for other allergies. One patient of 26 who said they were allergic to penicillin had a (\pm) reaction to BP. Seventy-four patients denied penicillin allergy of whom two were (\pm) and two (\pm) to BP. There were no untoward reactions to the skin testing. Skin tests should be used to confirm the diagnosis of penicillin allergy except in cases of anaphylaxis.

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Allergy Clinic of Tulsa, 1727 South Utica, Tulsa, OK 74104.

The recent outbreak of measles in Oklahoma serves as a reminder that despite relatively high levels of immunity in the population, a serious situation can develop in a short time period among those who are without protection against infectious diseases. The outbreak began with a single case in early July, and by late August confirmed and probable cases had been reported throughout the state.

Prior to the outbreak, survey of records by the Immunization Program Division of the Preventive Medical Service revealed that 86% of children attending day care centers, 95% of children attending kindergartens, and 92% of children in public schools were in compliance with state immunization statutes.

The majority of cases in the 1982 outbreak were among preschool-age children who had never been immunized. The youngest child was three months old, apparently born of a mother who had never been immunized or experienced the disease. The oldest child was thirteen years old and had never received a measles immunization, despite attendance in the public schools. These findings are in contrast to most measles outbreaks reported recently in the United States — most cases were among late teenage youngsters.

The recent experience also illustrates the ease with which infectious disease can be



News From The Oklahoma State Department of Health

transmitted across state lines. Early in the outbreak, one case traveled from Oklahoma to Florida to attend a major amusement park and returned to Oklahoma City, all within the possible incubation period. Another child traveled by car to Houston, Texas, arriving in that city during the most infectious period of the disease. His participation in a large music workshop, attended by an estimated 35,000 persons, opened the potential for spread across the US.

The recommendations of the Oklahoma State Board of Health regarding measles immunization are in accordance with those of the Centers for Disease Control and the American Academy of Pediatrics. The central theme of the recommendation is that children should receive immunization at age 15 months. Details of the board's recommendations for all immunizations can be obtained by contacting the Immunization Division, Oklahoma State Department of Health, P O Box 53551, Oklahoma City, OK, 73152, telephone 405-271-4073. □

COMMUNICABLE DISEASES IN OKLAHOMA FOR JULY, 1982

DISEASE	JULY	JULY	JUNE	TOTAL TO DATE	
	1982	1981	1982	1982	1981
Amebiasis	—	6	3	9	15
Aseptic Meningitis	29	7	15	66	48
Brucellosis	—	—	—	3	3
Encephalitis, Infectious	3	1	2	16	16
Gonorrhea (Use Form ODH-228)	1527	1414	1396	9257	8854
Hepatitis A	74	31	33	406	179
Hepatitis B	40	17	29	190	127
Hepatitis Unspecified	31	3	10	155	83
Malaria	3	—	—	6	5
Measles (Rubeola)	—	—	—	—	5
Meningococcal Infections	7	3	3	23	31
Pertussis	—	—	1	3	1
Rabies (Animal)	17	21	11	132	144
Rocky Mountain Spotted Fever	24	17	13	55	83
Rubella	—	—	1	3	—
Salmonellosis	58	48	46	186	197
Shigellosis	49	22	23	185	138
Syphilis (Use Form ODH-228)	5	—	3	26	—
Tetanus	—	—	1	1	1
Tuberculosis	25	34	37	220	195
Tularemia	9	1	7	20	15
Typhoid Fever	—	—	—	2	4

CAVEAT EMPTOR RE: Claims Made Insurance

The House of Delegates has instructed OSMA Officers and Staff to warn members of the association of the hazards of Claims Made professional liability insurance. The resolution below identifies some of these hazards. There are others. Officials of PLICO and OSMA are prepared to meet with individuals or groups of physicians to discuss the important differences between traditional Occurrence insurance and the Claims Made concept. Members are encouraged to contact the OSMA office or PLICO headquarters to resolve any questions about their insurance program.

RESOLUTION: 16
(APPROVED AS AMENDED)

May 8, 1982

INTRODUCED BY: C. Alton Brown, MD
SUBJECT: Claims Made Insurance
REFERRED TO: Reference Committee I

WHEREAS, the House of Delegates is concerned that the members of the OSMA have available the best possible form of professional liability insurance at a reasonable price based upon the experience of Oklahoma doctors, and

WHEREAS, the OSMA and its members have acted to form Physicians Liability Insurance Company (PLICO) and to issue an occurrence form of professional liability policy which covers the insured doctor for claims which occur during the policy period *regardless* of when the claims are reported, and

WHEREAS, a claims made form of professional liability insurance policy will soon be offered in Oklahoma by a commercial insurance carrier, which form of policy provides coverage limited only to those claims which occur during the policy period *and* are reported during the term of the policy, and

WHEREAS, the claims made policy will be sold at a premium based upon rates which increase annually over a 5-year period, and

WHEREAS, in order to adequately protect himself and his patients, a doctor who purchases claims made coverage will have to purchase reporting endorsement coverage (coverage for claims made after the termination of

the policy), and pay a premium in addition to the premiums charged during the term of the policy, thereby increasing the cost of a claims made policy, and

WHEREAS, the House of Delegates is concerned that some doctors may be deceived into purchasing the claims made form of policy by the apparently low first-year premium and by not being fully informed as to the limitations on the coverage offered by such policy; therefore be it

Resolved, that the House of Delegates warns all doctors to carefully examine and understand the terms of coverage offered by a claims made form of professional liability insurance policy, and be it further

Resolved, that the House of Delegates urges the doctors to compare the cost of the PLICO occurrence policy to the true cost of a claims made policy, including the matured rate of premium and the cost of buying reporting endorsement coverage, and be it further

Resolved, it is the intent of this resolution that all of the doctors in the state be aware of the possible coverage problems arising out of the use of the claims made form of professional liability policy and not be deceived into purchasing such a policy without being fully advised of the coverage provided and the cost of such policy, and be it further

Resolved, that the Board of Trustees of the OSMA circulate this resolution and such other information as may be necessary to inform Oklahoma doctors as to the dangers of claims made insurance policies. □



First-year medical students (left) from the University College of Medicine enjoy the picnic dinner at Will Rogers Park.

OSMA President Dr John A. McIntyre (below) talks with students about medicine in Oklahoma.

Medical Students and Physicians Exchange Views at OSMA Picnic

A crowd of nearly 200 students, spouses, physicians, and staff showed up for the First Annual OSMA Student Picnic held August 20 at Will Rogers Park in Oklahoma City. The picnic was the kick-off for the series of roundtable discussions for students cosponsored by OSMA and the University of Oklahoma College of Medicine.

Picnickers feasted on fried chicken, corn on the cob, and potato salad in a setting conducive to an informal exchange of information between students and physicians. With the exception of some brief remarks from OU faculty member Dr Wilson D. Steen and OSMA President Dr John A. McIntyre, there were no formal speeches or presentations.

The picnic and the discussion series are part of the Student Communications Program initiated by OSMA to bridge the communication gap that has developed over the years between medical students and organized medicine. The goals of the

program are to familiarize students with aspects of medicine they don't ordinarily encounter in their studies and to interest them in becoming active members of the medical association. □



Physicians Named Life Members At Board of Trustees Meeting

Six Oklahoma physicians were elected to OSMA Life Membership at the OSMA Board of Trustees meeting in May.

The new life members are: Emma Jean Anthis, MD, Healdton; Elizabeth P. Fleming, MD, Norman; Bill G. Henley, MD, Lawton; Thornton Kell, MD, Ardmore; Ralph S. Phelan, MD, Hobart; Paul H. Rempel, MD, Enid; and Homer V. Archer, MD, Oklahoma City.

To be eligible for OSMA Life Membership, a physician must be a member in good standing of the association and must meet one or more of the following criteria: be retired from the active practice of medicine because of ill health or age; be engaged in the active practice of medicine for 50 or more years; be 70 years of age. □

Ethics and Technology Series Returning to PBS This Fall

"Hard Choices" is returning to the Public Broadcasting System (PBS) this fall. This six-part series focuses on some of the most important ethical issues being raised as a result of remarkable advancements in medical technology.

The "Hard Choices" series presents its subjects in lively, multifaceted, and balanced ways. Hosted by Dr Willard Gaylin, the series considers such topics as sex selection of children, genetic screening, human experimentation, behavior control, death and dying, and justice and health care. Dr Gaylin is a practicing psychiatrist in New York City.

Consult your local PBS listings for broadcast dates and times. Transcripts of each "Hard Choices" program are available by writing to PTV Publications, PO Box 707, Kent, Ohio 44240. Videotape cassettes (3/4") are available for sale or rental from PBS Video, 475 L'Enfant Plaza W, SW, Washington, DC 20024. □

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ASIM Publishes Revised Guide On Hospital Staff Privileges

The American Society of Internal Medicine (ASIM) has issued a revised edition of *Delineation of Hospital Medical Staff Privileges*, a guide for medical staff in the process of granting clinical privileges to qualified applicants.

The six-page guide was revised to assure adherence to current standards of the Joint Commission on Accreditation of Hospitals. It takes a categorization approach to delineation of privileges for hospital medical departments and emphasizes demonstrated competence as the key benchmark for the granting of privileges.

The publication is available to ASIM members without charge and to non-members for three dollars per copy. Guides may be ordered from the American Society of Internal Medicine, Literature Order Dept. MM, 1101 Vermont Avenue, NW, Suite 500, Washington, DC 20005. □

Budget Cuts Eliminate Funds For Senior Citizens Newspaper

After almost six years of publication, *The Sage Age* newspaper for senior citizens in central Oklahoma has ceased operation. As a result of federal budget cuts in programs and services to the elderly, the Areawide Aging Agency was forced to eliminate grant funding for the newspaper.

The Sage Age was founded in 1976 and was published by Senior Information Services, Inc., a not-for-profit educational organization. It served senior citizens in Canadian, Cleveland, Logan, and Oklahoma counties. The newspaper provided its readers with authoritative information on health and nutrition as well as articles on social activities, transportation services, and employment opportunities for the elderly.

OSMA had made some modest financial contributions to *The Sage Age* during the past several Christmas holiday seasons to send greetings to the newspaper's readers. The association regrets the passing of this valuable information source for Oklahoma's elderly. □

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Deaths

THOMAS H. FAIR, MD
1924-1982

Thomas H. Fair, MD, a Tulsa internist for over 30 years, died August 15, 1982 in New York. A native of Tulsa, Dr Fair was graduated from the University of Oklahoma College of Medicine in 1947. Following his residency training in Cleveland, Ohio, he established his practice in Tulsa.

CLYDE E. HARRIS, MD
1919-1982

An Oklahoma City general practitioner for over 30 years, Clyde E. Harris, MD, died September 1, 1982. Born in Quitman, TX, Dr Harris was graduated from the University of Oklahoma College of Medicine in 1943. He was a member of the Phi Beta Kappa. □

Referral Centers and Clinics Listed for Genetics Program

The August issue of the *Journal* contained a report on a statewide Genetics Outreach Clinic Program for Oklahoma established under the auspices of the Maternal and Child Health Services of the State Department of Health. The program coordinator has asked that the referral centers and outreach clinics be listed again to clarify the locations and personnel assigned to them.

Tulsa Referral Center

Burhan Say, MD
Children's Medical Center
(918) 664-6600, ext. 501

Claremore Outreach Clinic

Gwen Liebl, RN
Rogers County Department of Health
(918) 341-3166

Muskogee Outreach Clinic

Verba Wilson, RN
Muskogee County Department of Health
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In Memoriam

1981

<i>S. N. Stone, Jr., MD</i>	<i>November 9</i>
<i>F. R. Hassler, MD</i>	<i>December 12</i>
<i>James R. Barnes, MD</i>	<i>December 13</i>
<i>E. Rankin Denny, MD</i>	<i>December 16</i>
<i>John P. Grimes, MD</i>	<i>December 24</i>

1982

<i>Frances P. Newlin, MD</i>	<i>February 16</i>
<i>James T. Maddox, MD</i>	<i>February 21</i>
<i>Joseph F. Messenbaugh, MD</i>	<i>March 12</i>
<i>James Russell Kreger, MD</i>	<i>April 3</i>
<i>Boyd Vance Lucas, MD</i>	<i>April 9</i>
<i>Carlton E. Smith, MD</i>	<i>April 23</i>
<i>Ella H. Murray, MD</i>	<i>May 3</i>
<i>Loyd G. Williams, MD</i>	<i>May 15</i>
<i>A. A. Walker, MD</i>	<i>July</i>
<i>Thomas H. Fair, MD</i>	<i>August 15</i>
<i>Clyde E. Harris, MD</i>	<i>September 1</i>

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Oklahoma Hospital Room Rates Show Slower Pace of Increase

The Oklahoma Hospital Association (OHA) reports that during the first six months of 1982, the rate of increase for semiprivate room rates in Oklahoma hospitals declined in comparison with the same six-month period for 1981 and 1980.

Information from the OHA Data Bank indicated that room rates increased 5.0% in the first six months of this year. In 1981 room rates for the same period jumped 8.5%, while in 1980 they increased by more than 15%.

Hospitals in Oklahoma rank 37th nationally for semiprivate room rates. In January 1982 the average semiprivate room rate in Oklahoma was \$115, compared with a national average of \$152. □

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Childrens Hospital Initiates Infant Car Seat Loan Program

A car seat loaner program has been established at Oklahoma Children's Memorial Hospital to encourage the protection of infants through the use of auto safety devices.

"Operation Car Seat" is sponsored by the hospital's Neonatal Intensive Care Unit (NICU) and Dockum Pontiac of Oklahoma City. Any infant discharged from the NICU via automobile is eligible for the program. For a refundable five dollars deposit, a fragile newborn can ride home safely.

Stephen Ryter, MD, coordinator for the Oklahoma chapter of the American Academy of Pediatrics (AAP), said that Childrens Hospital is the only hospital in Oklahoma City with such a program. Two other car seat loaner programs operate elsewhere in the state.

One of these programs is operated by the Pottawatomie County Medical Society Auxiliary for families in the Shawnee-Tecumseh area. The auxiliary loans the seats for up to nine months or until the infant reaches a weight of 20 pounds.

"Last year about 850 children under five years of age died of injuries from automobile accidents across the United States," Dr Ryter points out, "and another 70,000 were injured." AAP statistics show that more children die from automobile-related injuries each year than from any disease. □

Book Review

David Wendell Yandell: Physician of Old Louisville. Nancy D. Baird. Lexington: University Press of Kentucky, 1978. 116 pages. Price \$4.95.

Yandell is described in the title of this book as a physician of old Louisville. In addition, there are some interesting periods of his life not identified with Louisville or Kentucky, which are included in this excellent biography. To the Civil War student, he immediately comes to mind as the medical director for Confederate General Albert Sidney Johnston. While in that position, he unfortunately was absent, treating other wounded personnel (by the General's orders) when he could have prevented General Johnston from dying of his

wound at the battle of Shiloh. To others, he was the son of a successful physician and the grandson of a respected physician on the Tennessee frontier, Wilson Yandell.

Yandell was graduated from the Louisville Medical Institute. Following two years study in England and France, he returned to the United States in 1848 and sought one of the vacant faculty chairs at the University of Louisville Medical Department. He was rejected because of his youth and because his father was already on the faculty.

After his marriage, Yandell and his bride located near Nashville, where he practiced medicine, farmed and celebrated the birth of his first two children. Returning to Louisville in 1854, David opened a free outpatient clinic, acted as preceptor for many young apprentices, and joined the faculty of the medical school on a part-time basis. He subsequently accepted a full-time chair at the University of Louisville. He resigned from the school to join the Confed-

erate Army Medical Department in 1861. His military service was marked by innovations in patient care and the establishment of an examining board for screening medical applicants to weed out incompetents. His duty was also marked by his indiscreet comments on military affairs which raised the ire of President Jefferson Davis.

After the war, Yandell returned to Louisville where he quickly built his practice and rejoined the University as its Professor of Surgery. His approach to medical education was practical. He was said to be an excellent teacher and lecturer. He was also editor of several journals and advocated better regulation of the profession to improve the quality of its members. He served as President of the American Medical Association in 1871.

Mrs Baird has written an interesting account of Yandell that further illuminates his times and will make the reader aware of just how far medical science, medical education, and military medicine have advanced since those days. *Harris D. Riley, Jr., MD* □

Miscellaneous Advertisements

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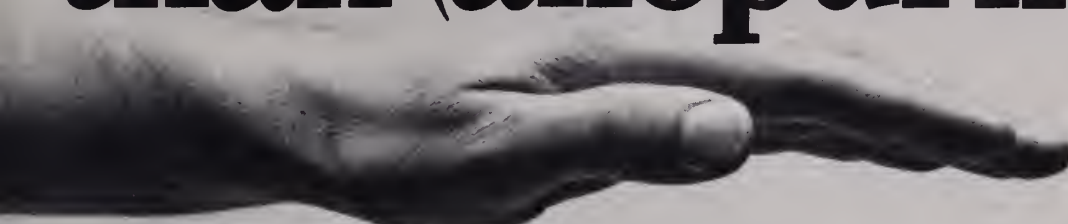
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Specific therapy with h.s. dosage convenience

Please see summary of complete product information on following page.

LIMBITROL® TABLETS Tranquilizer—Antidepressant

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of moderate to severe depression associated with moderate to severe anxiety

Contraindications: Known hypersensitivity to benzodiazepines or tricyclic antidepressants. Do not use with monoamine oxidase (MAO) inhibitors or within 14 days following discontinuation of MAO inhibitors since hyperpyretic crises, severe convulsions and deaths have occurred with concomitant use, then initiate cautiously gradually increasing dosage until optimal response is achieved. Contraindicated during acute recovery phase following myocardial infarction

Warnings: Use with great care in patients with history of urinary retention or angle-closure glaucoma. Severe constipation may occur in patients taking tricyclic antidepressants and anticholinergic-type drugs. Closely supervise cardiovascular patients (Arrhythmias, sinus tachycardia and prolongation of conduction time reported with use of tricyclic antidepressants, especially high doses. Myocardial infarction and stroke reported with use of this class of drugs.) Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (e.g. operating machinery, driving)

Usage in Pregnancy: Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies.

Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Since physical and psychological dependence to chlordiazepoxide have been reported rarely, use caution in administering Limbitrol to addiction-prone individuals or those who might increase dosage, withdrawal symptoms following discontinuation of either component alone have been reported (nausea, headache and malaise for amitriptyline, symptoms [including convulsions] similar to those of barbiturate withdrawal for chlordiazepoxide)

Precautions: Use with caution in patients with a history of seizures, in hyperthyroid patients or those on thyroid medication, and in patients with impaired renal or hepatic function. Because of the possibility of suicide in depressed patients, do not permit easy access to large quantities in these patients. Periodic liver function tests and blood counts are recommended during prolonged treatment. Amitriptyline component may block action of guanethidine or similar antihypertensives. Concomitant use with other psychotropic drugs has not been evaluated. Sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precautions about pregnancy. Limbitrol should not be taken during the nursing period. Not recommended in children under 12. In the elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects.

Adverse Reactions: Most frequently reported are those associated with either component alone: drowsiness, dry mouth, constipation, blurred vision, dizziness and bloating. Less frequently occurring reactions include vivid dreams, impotence, tremor, confusion and nasal congestion. Many depressive symptoms including anorexia, fatigue, weakness, restlessness and lethargy have been reported as side effects of both Limbitrol and amitriptyline. Granulocytopenia, jaundice and hepatic dysfunction have been observed rarely.

The following list includes adverse reactions not reported with Limbitrol but requiring consideration because they have been reported with one or both components or closely related drugs:

Cardiovascular: Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke

Psychiatric: Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania and increased or decreased libido

Neurologic: Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns

Anticholinergic: Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract

Allergic: Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus

Hematologic: Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia

Gastrointestinal: Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue

Endocrine: Testicular swelling and gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female and elevation and lowering of blood sugar levels

Other: Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling

Overdosage: Immediately hospitalize patient suspected of having taken an overdose. Treatment is symptomatic and supportive. IV administration of 1 to 3 mg physostigmine salicylate has been reported to reverse the symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment.

Dosage: Individualize according to symptom severity and patient response. Reduce to smallest effective dosage when satisfactory response is obtained. Larger portion of daily dose may be taken at bedtime. Single *h.s.* dose may suffice for some patients. Lower dosages are recommended for the elderly. Limbitrol 10-25, initial dosage of three to four tablets daily in divided doses, increased to six tablets or decreased to two tablets daily as required. Limbitrol 5-12.5, initial dosage of three to four tablets daily in divided doses, for patients who do not tolerate higher doses.

How Supplied: White, film-coated tablets, each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) and blue, film-coated tablets, each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt)—bottles of 100 and 500, Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10, Prescription Paks of 50.

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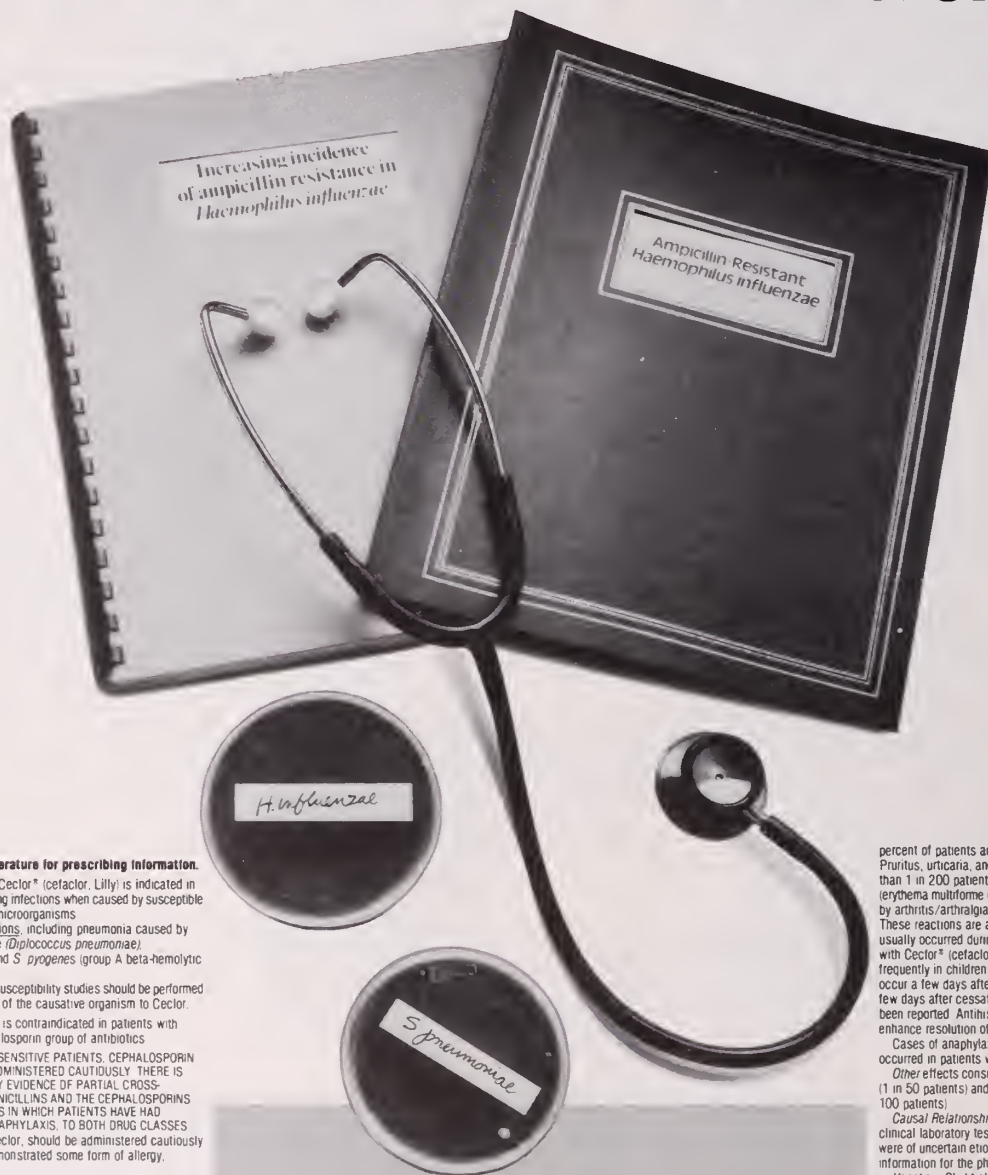
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An added complication... in the treatment of bacterial bronchitis*



Brief Summary.

Consult the package literature for prescribing information.

Indications and Usage: Cefclor* (cefclor, Lilly) is indicated in the treatment of the following infections when caused by susceptible strains of the designated microorganisms:

Lower respiratory infections, including pneumonia caused by *Streptococcus pneumoniae* (*Diplococcus pneumoniae*), *Haemophilus influenzae*, and *S. pyogenes* (group A beta-hemolytic streptococci).

Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Cefclor.

Contraindication: Cefclor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics.

Warnings: IN PENICILLIN-SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY. THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS, INCLUDING ANAPHYLAXIS, TO BOTH DRUG CLASSES.

Antibiotics, including Cefclor, should be administered cautiously to any patient who has demonstrated some form of allergy, particularly to drugs.

Precautions: If an allergic reaction to cefclor occurs, the drug should be discontinued, and, if necessary, the patient should be treated with appropriate agents, e.g., pressor amines, antihistamines, or corticosteroids.

Prolonged use of cefclor may result in the overgrowth of nonsusceptible organisms. Careful observation of the patient is essential. If superinfection occurs during therapy appropriate measures should be taken.

Positive direct Coombs tests have been reported during treatment with the cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coomb testing of newborns whose mothers have received cephalosporin antibiotics before parturition it should be recognized that a positive Coombs test may be due to the drug.

Cefclor should be administered with caution in the presence of markedly impaired renal function. Under such a condition, careful clinical observation and laboratory studies should be made, because safe dosage may be lower than that usually recommended.

As a result of administration of Cefclor, a false-positive reaction for glucose in the urine may occur. This has been observed with Benedict's and Fehling's solutions and also with Clinitest* tablets but not with Tes-Tape* (Glucose Enzymatic Test Strip, USP, Lilly).

Usage in Pregnancy: Although no teratogenic or antifertility effects were seen in reproduction studies in mice and rats receiving up to 12 times the maximum human dose or in ferrets given three times the maximum human dose, the safety of this drug for use in human pregnancy has not been established. The benefits of the drug in pregnant women should be weighed against a possible risk to the fetus.

Usage in Infancy: Safety of this product for use in infants less than one month of age has not been established.

Adverse Reactions: Adverse effects considered related to cefclor therapy are uncommon and are listed below.

Gastrointestinal symptoms occur in about 2.5 percent of patients and include diarrhea (1 in 70) and nausea and vomiting (1 in 90).

As with other broad-spectrum antibiotics, colitis, including rare instances of pseudomembranous colitis, has been reported in conjunction with therapy with Cefclor.

Hypersensitivity reactions have been reported in about 1.5

Some ampicillin-resistant strains of *Haemophilus influenzae*—a recognized complication of bacterial bronchitis*—are sensitive to treatment with Cefclor.¹⁻⁶

In clinical trials, patients with bacterial bronchitis due to susceptible strains of *Streptococcus pneumoniae*, *H. influenzae*, *S. pyogenes* (group A beta-hemolytic streptococci), or multiple organisms achieved a satisfactory clinical response with Cefclor.⁷

Cefclor®

cefclor

Pulvules®, 250 and 500 mg

percent of patients and include morbilliform eruptions (1 in 100), Pruritus, urticaria, and positive Coombs tests each occur in less than 1 in 200 patients. Cases of serum-sickness-like reactions (erythema multiforme or the above skin manifestations accompanied by arthritis/arthritis and, frequently, fever) have been reported. These reactions are apparently due to hypersensitivity and have usually occurred during or following a second course of therapy with Cefclor* (cefclor). Such reactions have been reported more frequently in children than in adults. Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.

Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.

Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients).

Causal Relationship Uncertain: Transitory abnormalities in clinical laboratory test results have been reported. Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician.

Hepatic: Slight elevations in SGOT, SGPT, or alkaline phosphatase values (1 in 40).

Hematopoietic: Transient fluctuations in leukocyte count, predominantly lymphocytosis occurring in infants and young children (1 in 40).

Renal: Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200). 1002818

*Many authorities attribute acute infectious exacerbation of chronic bronchitis to either *S. pneumoniae* or *H. influenzae*.¹

Note: Cefclor is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

References

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7. Data on file, Eli Lilly and Company.
8. Principles and Practice of Infectious Diseases edited by G.L. Mandell, R.G. Douglas, Jr., and J.E. Bennett, p. 487. New York: John Wiley & Sons, 1979.



Additional information available to the profession on request from Eli Lilly and Company, Indianapolis, Indiana 46285. Eli Lilly Industries, Inc., Carolina, Puerto Rico 00630.



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See next page for brief summary of prescribing information.

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References:

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RUFEN® (ibuprofen) Tablets

INDICATIONS AND USAGE: Treatment of signs and symptoms of rheumatoid arthritis and osteoarthritis during acute flares and in the long-term management of these diseases. Safety and effectiveness have not been established for Functional Class IV rheumatoid arthritis.

Relief of mild to moderate pain. Treatment of primary dysmenorrhea.

CONTRAINDICATIONS: Patients hypersensitive to ibuprofen, or with the syndrome of nasal polyps, angio-edema and bronchospastic reactivity to aspirin or other nonsteroidal anti-inflammatory drugs (see WARNINGS).

WARNINGS: Anaphylactoid reactions have occurred in patients hypersensitive to aspirin (see CONTRAINDICATIONS). Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Peptic ulceration, perforation, or gastrointestinal bleeding can end fatally, however, an association has not been established. Rufen should be given under close supervision to patients with a history of upper gastrointestinal tract disease, and only after consulting the ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be attempted. If Rufen must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding.

PRECAUTIONS: Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If developed, discontinue Rufen and administer an ophthalmologic examination.

Fluid retention and edema have been associated with Rufen; caution should be used in patients with a history of cardiac decompensation.

Rufen can inhibit platelet aggregation and prolong bleeding time. Use with caution in patients with intrinsic coagulation defects and those taking anticoagulants.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain or edema.

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy, this therapy should be tapered slowly when adding Rufen.

DRUG INTERACTION: Coumarin-type anticoagulants. The physician should be cautious when administering Rufen to patients on anticoagulants.

Aspirin: Concomitant use may decrease Rufen blood levels.

PREGNANCY AND NURSING MOTHERS: Rufen should not be taken during pregnancy nor by nursing mothers.

ADVERSE REACTIONS: Incidence greater than 1%. Gastrointestinal: The most frequent adverse reaction is gastrointestinal (4 to 16%). Includes nausea*, epigastric pain*, heartburn*, diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of GI tract (bloating and flatulence). Central Nervous System: dizziness*, headache, nervousness. Dermatologic: rash* (including maculopapular type), pruritus. Special Senses: tinnitus. Metabolic: decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS). *Incidence 3% to 9%.

Incidence less than 1 in 100. Gastrointestinal: gastric or duodenal ulcer with bleeding and/or perforation, hemorrhage, melena. Central Nervous System: depression, insomnia, confusion, emotional lability, somnolence, aseptic meningitis with fever and coma. Dermatologic: vesiculobullous eruptions, urticaria, erythema multiforme, Stevens-Johnson syndrome and alopecia. Special Senses: hearing loss, amblyopia, blurred and/or diminished vision, scotomata and/or changes in color vision (see PRECAUTIONS). Hematologic: neutropenia, agranulocytosis, aplastic anemia, hemolytic anemia (sometimes Coombs positive), thrombocytopenia with or without purpura eosinophilia, decreases in hemoglobin and hematocrit. Cardiovascular: congestive heart failure in patients with marginal cardiac function, elevated blood pressure. Allergic: syndrome of abdominal pain, fever, chills, nausea and vomiting, anaphylaxis, bronchospasms (see CONTRAINDICATIONS). Renal: acute renal failure in patients with preexisting significantly impaired renal function, decreased creatinine clearance, polyuria, azotemia, cystitis, hematuria. Miscellaneous: dry eyes and mouth, gingival ulcers, rhinitis.

Causal relationship unknown: Gastrointestinal: pancreatitis. Central Nervous System: paresthesias, hallucinations, dream abnormalities, pseudotumor cerebri. Dermatologic: toxic epidermal necrolysis, photo-allergic skin reactions. Special Senses: conjunctivitis, diplopia, optic neuritis. Hematologic: bleeding episodes. Allergic: serum sickness, lupus erythematosus syndrome, Henoch-Schönlein vasculitis. Endocrine: gynecomastia, hypoglycemia. Cardiovascular: arrhythmias (sinus tachycardia, bradycardia, and palpitations). Renal: renal papillary necrosis.

OVERDOSAGE: Acute overdosage, the stomach should be emptied. Rufen is acidic and excreted in the urine, alkaline diuresis may benefit.

DOSE AND ADMINISTRATION: Rheumatoid arthritis and osteoarthritis, including flareups of chronic disease: Suggested dosage 400 mg t.i.d. or q.i.d.

Dysmenorrhea: 400 mg every 4 hours as necessary

Mild to moderate pain: 400 mg every 4 to 6 hours as necessary for the relief of pain. Do not exceed 2,400 mg per day

CAUTION: Federal law prohibits dispensing without prescription.

ALL FOR ONE ONE FOR ALL



Alexandre Dumas'
The Three Musketeers
and D'Artagnan

ONE FOR ALL – One tablet treats pinworm
in any patient, regardless of age or body weight.*
Obviates need to calculate individual dosages.

A single tablet eradicates pinworm in 95% of patients.

*Contraindicated in pregnant women and in persons who have shown hypersensitivity to the drug.

VERMOX[®] CHEWABLE TABLETS
(mebendazole)



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The #1 anthelmintic for pinworms and many other worm infestations

Please see complete Prescribing Information on adjacent page.

VERMOX[®] CHEWABLE TABLETS

(mebendazole)

Rx

Vermox
Tabs #4
Sig 1 tab
each family
member

DESCRIPTION VERMOX (mebendazole) is methyl 5-benzoylbenzimidazole-2-carbamate.

ACTIONS VERMOX exerts its anthelmintic effect by blocking glucose uptake by the susceptible helminths, thereby depleting the energy level until it becomes inadequate for survival. In man, approximately 2% of administered mebendazole is excreted in urine as unchanged drug or a primary metabolite. Following administration of 100 mg of mebendazole twice daily for three consecutive days, plasma levels of mebendazole and its primary metabolite, the 2-amine, never exceeded 0.03 µg/ml and 0.09 µg/ml, respectively.

INDICATIONS VERMOX is indicated for the treatment of *Trichuris trichiura* (whipworm), *Enterobius vermicularis* (pinworm), *Ascaris lumbricoides* (common roundworm), *Ancylostoma duodenale* (common hookworm), *Necator americanus* (American hookworm) in single or mixed infections. Efficacy varies as a function of such factors as pre-existing diarrhea and gastrointestinal transit time, degree of infection and helminth strains. Efficacy rates derived from various studies are shown in the table below:

	Whipworm	Common Roundworm	Hookworm	Pinworm
cure rates mean (range)	68% (61-75%)	98% (91-100%)	96% -	95% (90-100%)
egg reduction mean (range)	93% (70-99%)	99.7% (99.5%-100%)	99.9% -	- -

CONTRAINDICATIONS VERMOX is contraindicated in pregnant women (see Pregnancy Precautions) and in persons who have shown hypersensitivity to the drug.

PRECAUTIONS **PREGNANCY:** VERMOX has shown embryotoxic and teratogenic activity in pregnant rats at single oral doses as low as 10 mg/kg. Since VERMOX may have a risk of producing fetal damage if administered during pregnancy, it is contraindicated in pregnant women.

PEDIATRIC USE: The drug has not been extensively studied in children under two years; therefore, in the treatment of children under two years the relative benefit/risk should be considered.

ADVERSE REACTIONS Transient symptoms of abdominal pain and diarrhea have occurred in cases of massive infection and expulsion of worms.

DOSAGE AND ADMINISTRATION The same dosage schedule applies to children and adults. The tablet may be chewed, swallowed or crushed and mixed with food. For the control of pinworm (enterobiasis), a single tablet is administered orally, one time. For the control of common roundworm (ascariasis), whipworm (trichuriasis), and hookworm infection, one tablet of VERMOX is administered, orally, morning and evening, on three consecutive days. If the patient is not cured three weeks after treatment, a second course of treatment is advised. No special procedures, such as fasting or purging, are required.

HOW SUPPLIED VERMOX is available as chewable tablets, each containing 100 mg of mebendazole, and is supplied in boxes of twelve tablets. VERMOX (mebendazole) is an original product of Janssen Pharmaceutica, Belgium.

US Patent 3,657,267
December 1979

Committed to research...
because so much remains to be done.

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Antiminth® (pyrantel pamoate) has a unique, rapid immobilizing effect on worms. Unlike mebendazole, which blocks glucose uptake—slowly “starving” helminths to death—Antiminth quickly acts on the neuromuscular junction to promptly paralyze parasites.

97% efficacy with a single dose

A single dose of Antiminth delivers rapid clinical and parasitological cures, “Single doses... showed high overall efficacy against *Enterobius vermicularis* (97.2%) and *Ascaris lumbricoides* (97.5%).”¹

Simple, well tolerated therapy

Antiminth offers ease of administration and patient tolerance. ...when compared to the other single dose agents available, [Antiminth] has the advantage of being non-staining and may be better tolerated.”²

The dosage form children like

Antiminth is available as a pleasant tasting, caramel-flavored oral suspension. Effective in just



one dose against pinworm and roundworm—in both children and adults—Antiminth is easy-to-administer and easy-to-take.

Respected around-the-world

In some parts of the world, large populations are afflicted with helminthic infections. Physicians in endemic areas have become experts on parasitic diseases—and have come to rely on Antiminth for the rapid cure of infestations. Antiminth is recommended as an agent of first choice for pinworm and roundworm by leading medical authorities.³

Warnings

Usage in Pregnancy Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

The drug has not been extensively studied in children under two years; therefore, in the treatment of children under the age of two years, the relative benefit/risk should be considered.

Precautions

Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with pre-existing liver dysfunction.

Adverse Reactions

The most frequently encountered adverse reactions are related to the gastrointestinal system. Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

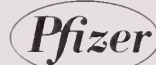
CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

Dosage and Administration

Children and Adults Antiminth Oral Suspension (50 mg of pyrantel base/ml) should be administered in a single dose of 11 mg of pyrantel base per kg of body weight (or 5 mg/lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 ml of Antiminth per 10 lb. of body weight. (One teaspoonful = 5 ml.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day, and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices.

References 1. Pitts NE, Migliardi JR: *Clinical Pediatrics* 13:87, 1974. 2. Modell W: *Drugs of Choice* 1980-1981. C. V. Mosby Co., St. Louis, 1980, p. 362. 3. Goodman LS, Gilman A: *The Pharmacologic Basis of Therapeutics*, 6th edition, MacMillan Publishing Co., Inc., New York, 1980, p. 1032.



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Dalmane (*flurazepam HCl/Roche*)
patients fall asleep faster,
sleep longer and seldom awaken
with morning hangover.

Feeling well rested in the morning usually means having slept well the night before. And for insomniac patients receiving hypnotic therapy, a good morning also means awakening with few side effects from their medication. Many physicians choose Dalmane for their patients who suffer from insomnia for this very reason.

Aside from enabling patients to fall asleep more quickly and sleep longer, Dalmane seldom causes morning hangover. Most Dalmane patients feel alert and refreshed when they awaken. In 53 paired-night clinical studies comparing Dalmane and placebo in 2010 insomniac patients with a variety of secondary diagnoses, most Dalmane patients awakened more alert and refreshed, and less groggy and drowsy, than on nights when they had taken only placebo.¹ In a double-blind crossover study of

42 patients in private practice, approximately three times as many patients reported feeling refreshed and alert upon awakening after a night on Dalmane (flurazepam/Roche) compared to placebo nights.² This difference was highly significant ($p < 0.001$). And a retrospective study of 254 hospitalized patients who received Dalmane revealed only a 3.1% incidence of side effects.³

While residual effects from Dalmane therapy are infrequent, patients should be cautioned about drinking alcohol, driving or operating hazardous machinery after ingesting the drug.

Efficacy and safety in a broad range of patient types.

Over 2000 clinical trials involving more than 10,000 patients have shown that Dalmane patients fall asleep sooner, sleep longer and experience fewer nocturnal awakenings.⁴ The safety and efficacy of Dalmane have been demonstrated in medical and surgical hospitalized patients, in patients seen in office practice and in elderly patients.⁵⁻⁸ Since the risk of oversedation, dizziness, confu-

ROCHE

sion and/or ataxia increases with larger doses in the elderly, it is recommended that the dosage be limited to 15 mg.

Moreover, the efficacy and safety of Dalmane for the treatment of insomnia have been demonstrated in thousands of patients with a variety of primary medical conditions, including cardiovascular, neuropsychiatric, endocrine-metabolic, gastrointestinal, genitourinary, respiratory and musculoskeletal disorders.¹ Dalmane (flurazepam HCl/Roche) is contraindicated in pregnancy and in patients hypersensitive to the drug.

Avoids rebound insomnia upon discontinuation.

Rebound insomnia—a worsening of sleep beyond pretherapy levels after drug discontinuation—has been reported as a potential clinical problem with some hypnotics.^{9,10} However, this problem has not been reported with Dalmane. In eight out of eight sleep laboratory studies, there were no reports of rebound insomnia.¹¹ When you prescribe Dalmane, you can be confident of efficacy that enhances therapeutic progress. Your insomniac patients can be assured of a restful night, night after night—a good start for a good morning.

References: 1. Data on file, Hoffmann-La Roche Inc., Nutley, NJ. 2. Zimmerman AM: *Curr Ther Res* 13:18-22, Jan 1971. 3. Greenblatt DJ, Allen MD, Shader RI: *Clin Pharmacol Ther* 21:355-361, Mar 1977. 4. Data on file, Hoffmann-La Roche Inc., Nutley, NJ. 5. Meyer JA, Kurland KZ: *Milit Med* 138:471-474, Aug 1973. 6. Feller HL, Gibbons B: *Med Times* 101(8):130-135, Aug 1973. 7. Jacobson A et al: *Psychophysiology* 7:345, Sep 1970. 8. Frost JD Jr, DeLucchi MR: *J Am Geriatr Soc* 27:541-546, Dec 1979. 9. Kales A, Scharf MB, Kales JD: *Science* 201:1039-1041, Sep 1978. 10. Kales A et al: *JAMA* 241:1692-1695, Apr 1979. 11. Monti JM: *Methods Find Exp Clin Pharmacol* 3(5):303-326, 1981.

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Before prescribing, please consult complete product information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; in acute or chronic medical situations requiring restful sleep. Objective sleep laboratory data have shown effectiveness for at least 28 consecutive nights of administration. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended. Repeated therapy should only be undertaken with appropriate patient evaluation.

Contraindications: Known hypersensitivity to flurazepam HCl; pregnancy. Benzodiazepines may cause fetal damage when administered during pregnancy. Several studies suggest an increased risk of congenital malformations associated with benzodiazepine use during the first trimester. Warn patients of the potential risks to the fetus should the possibility of becoming pregnant exist while receiving flurazepam. Instruct patient to discontinue drug prior to becoming pregnant. Consider the possibility of pregnancy prior to instituting therapy.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. An additive effect may occur if alcohol is consumed the day following use for nighttime sedation. This potential may exist for several days following discontinuation. Caution against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Potential impairment of performance of such activities may occur the day following ingestion. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, abrupt discontinuation should be avoided with gradual tapering of dosage for those patients on medication for a prolonged period of time. Use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, lightheadedness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase; and paradoxical reactions, e.g., excitement, stimulation and hyperactivity.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg recommended initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.



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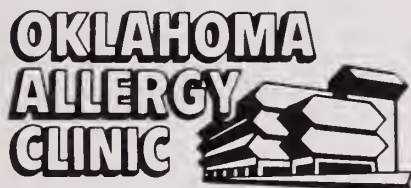
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STYLE

Footnotes, bibliographies, and legends for illustrations should be submitted on separate sheets, double-spaced. Bibliographies should follow in order of: name and author, title or article, name of periodical with volume number, page and date of publication. These references should be numbered in the sequence in which they appear in the article.

ILLUSTRATIONS

Illustrations, other than the author's will not be accepted for publication unless accompanied by written permission to be reproduced. Illustrations should be identified by the author's name and the figure number of the illustrations. The illustrations should be numbered in the same order as referred to in the body of the article. Used photographs, and drawings will be returned after publication if requested. *The Journal* will pay for necessary black and white illustrations within reasonable limitations. The quality of drawings, sketches, etc., must be in keeping with the quality of the magazine.

NEWS

Members of the Oklahoma State Medical Association, the constituent societies of the association, and all readers in general are invited to supply news items of general interest to the profession.

ADVERTISING

All advertising copy must be approved by the Editorial Board before acceptance for publication. General and miscellaneous advertising rates will be sent on request.

EDITING SERVICE

The Editorial Board reserves the prerogative to submit contributions to a Medical Editing Service when warranted. If such is felt necessary, the Editor will contact the author for approval, informing him that there will be a modest charge for this service.

REPRINTS

Authors will receive reprint order forms from the Transcript Press, P.O. Drawer 1058, Norman, Oklahoma 73070, prior to final publication of their articles. Other requests for reprints must be made to the Transcript Press within 30 days after publication.

BACK ISSUES

Microfilm copies of back issues of *The Journal* may now be purchased from University Microfilms International, 300 North Zeeb Road, Ann Arbor, Michigan 48106.

Delegates to the 1982 AMA Auxiliary Annual Convention adopted resolutions calling for programs to:

1. Help the spouse and family of impaired physicians.
2. Encourage coalitions with health organizations.
3. Prevent child abuse.
4. Promote parental awareness regarding marijuana use among youth.
5. Enforce drunk driving laws.
6. Continue the Shape Up for Life campaign.
7. Encourage establishment of state organ donation awareness weeks.
8. Support home health care services in the community.

Informative workshops were conducted for AMA-ERF, Health Projects, Legislation and Membership. At the AMA-ERF workshop, a new contribution sheet was introduced to us and many new project ideas. Do you know auxiliaries raised \$1,742,913.68 for the AMA Education and Research Foundation this past year? The membership workshop focused on five groups of members: foreign born, male, widow, resident physician's spouse and those who live in metropolitan areas, and gave us insight into their needs as auxiliary members. Also on the subject of membership, Oklahoma received an award for increasing our membership over 10% this past year. An accomplishment of which we can be proud.

Betty Payne (Torrence) was installed as our new president and stressed the increased need for volunteers in our country today and the importance that we as auxiliaries fulfill that need since that concept has always been the purpose of the auxiliary. "We must be the ones who rise to this call because we care about the health of the people in our communities," said Betty. Her volunteer's creed is: "I am only one, but still I am one; I cannot do everything, but still I can do something; and because I cannot do ev-



Delegates to the AMA Auxiliary Annual Convention, top row, Maureen Bynum (l) and Blanche Kishner. Bottom row, (l to r) Camille Harrison, Betty Edge and Sherry Strebel.

everything, I will not refuse to do the something I can do."

At the opening ceremony of the AMA Convention, Oklahoma was recognized as having the first organized auxiliary in the nation. A brief report about the meeting 75 years ago in Shawnee was given and the auxiliary delegates from Oklahoma were asked to stand. This was a thrilling moment for your delegates.

I was proud to be a member of the Oklahoma delegation to the AMA Auxiliary Convention and thank you for this privilege. I wish each one of you could have been present in Chicago with us.

— Camille Harrison, President-Elect

Contemporary Medical Educators has scheduled two seminars for Oklahoma physicians that include opportunities for family vacations. The winter seminar is set for December 27, 1982 — January 1, 1983, at Copper Mountain Colorado. The spring seminar will be held March 19 — March 25, 1983, at South Padre Island, Texas. Both seminars feature continuing medical education courses with ample time for relaxation and family activities. The programs are produced by Contemporary Medical Educators with the Office of Continuing Medical Education, University of Oklahoma College of Medicine. Registration information may be obtained from Irwin H. Brown, MD, 5700 NW Grand Boulevard, Oklahoma City, Oklahoma 73112, (405) 946-0548.

A newly formed organization concerned with problems in perinatal health in southwestern Oklahoma will be chaired by Dr Robert Hillis. Vice-chairman is Dr William Newland. The organization was formed under the auspices of the Oklahoma Rural Infant Care Project.

A 30-minute color videotape titled "*Cellular Immunity and Immune Deficiency Diseases*" is available from the American Society of Clinical Pathologists. The film covers basic concepts of cellular immunity and immune deficiency diseases and presents a detailed discussion of laboratory methods and approaches to the phenomenon of cellular immunity. The program is suitable for residency training programs or continuing medical education for pathologists, immunologists and other interested physicians. The videotape is available in ½" Beta, ½" VHS, and ¾" U-Matic. It comes with a 37-page program monograph and one Category I CME set. Purchase price is \$275; rental is \$60 per month. To order the vid-

eotape, write the American Society of Clinical Pathologists, PO Box 12073, Chicago, Illinois 60612, or call toll-free (800) 621-4142.

The Texas Affiliate, American Diabetes Association, will present a clinical update on diabetes on October 21, 1982, at the Granada Royate Homotel, Dallas, Texas. The seminar, titled "Controversies in Management," will cover current treatment, methodology, and research of diabetes. Information on housing and registration may be obtained from the American Diabetes Association, 5415 Maple, Suite 216, Dallas, Texas 75235, (214) 638-5400.

Dr Richard Seal, a general practitioner in Perry, has been appointed as Noble County health officer to serve as medical consultant to the new county health unit that opened in August. The unit will deal primarily with nutrition, sanitation, and immunization programs.

The Oklahoma chapter of the American College of Physicians and the Oklahoma Society of Internal Medicine will hold their regional meeting in Shangri-La on October 29-31, 1982. Physicians interested in attending should contact the American College of Physicians chapter at 601 NW Expressway, Oklahoma City, Oklahoma 73118, (405) 843-9571 or (405) 341-4147.

The Oklahoma League for Nursing has scheduled a workshop for November 19, 1982, on transcultural health practices. The purpose of the workshop is to increase the sensitivity of individuals in the health care field to the beliefs and health care practices of Oklahomans with varied cultural backgrounds. The workshop will be held at the University of Oklahoma College of Nursing. □

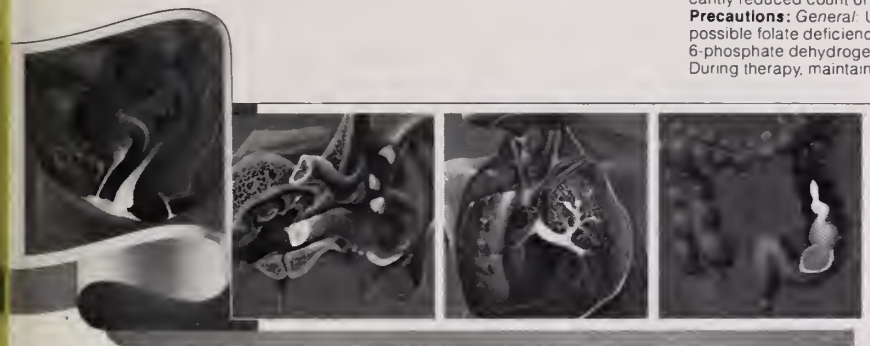
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For acute otitis media in children due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over other antimicrobials. To date, there are limited data on the safety of repeated use of Bactrim in children under two years of age. Bactrim is not indicated for prophylactic or prolonged administration in otitis media at any age. For acute exacerbations of chronic bronchitis in adults due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over a single antimicrobial agent.

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Warnings: **BACTRIM SHOULD NOT BE USED TO TREAT STREPTOCOCCAL PHARYNGITIS.** Clinical studies show that patients with group A β -hemolytic streptococcal tonsillopharyngitis have higher incidence of bacteriologic failure when treated with Bactrim than do those treated with penicillin. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.

Precautions: *General:* Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with

careful microscopic examination, and renal function tests, particularly where there is impaired renal function.

Bactrim may prolong prothrombin time in those receiving warfarin; reassess coagulation time when administering Bactrim to these patients.

Pregnancy: Teratogenic Effects: Pregnancy Category C. Because trimethoprim and sulfamethoxazole may interfere with folic acid metabolism, use during pregnancy only if potential benefits justify the potential risk to the fetus.

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Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for infants less than two months of age.

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Children: Recommended dosage for children with urinary tract infections or acute otitis media—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. Use identical daily dosage for 5 days for shigellosis.

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1. Rubin RH, Swartz MN: *N Engl J Med* 303 426-432 Aug 21, 1980. 2. Data on file, Medical Department, Hoffmann-La Roche Inc.

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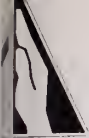
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1) bronchial asthma, 2) allergic rhinitis during the pollen season, 3) sinus bradycardia and greater than first degree block, 4) cardiogenic shock, 5) right ventricular failure secondary to pulmonary hypertension; 6) congestive heart failure (see WARNINGS) unless it is secondary to a tachyarrhythmia treatable with propranolol, 7) in patients on adrenergic-augmenting psychotropic drugs (including MAO inhibitors), and during the two week withdrawal period from such drugs.

WARNINGS

CARDIAC FAILURE In congestive heart failure, inhibition with beta-blockade carries the potential hazard of further depressing myocardial contractility and precipitating cardiac failure. In patients already receiving digitalis, propranolol may reduce the positive inotropic action of digitalis and may have an additive depressant effect on AV conduction.

IN PATIENTS WITHOUT A HISTORY OF CARDIAC FAILURE, in rare instances, cardiac failure has developed during propranolol therapy. At the first sign of impending cardiac failure, patients should be fully digitalized and/or given a diuretic, and observed closely. a) if cardiac failure continues, despite adequate digitalization and diuretic therapy, propranolol should be immediately withdrawn. b) if tachyarrhythmia is being controlled, patients should be maintained on combined therapy and closely followed until threat of cardiac failure is over.

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following abrupt discontinuation of Inderal therapy. Therefore, when discontinuance of Inderal is planned the dosage should be gradually reduced and the patient carefully monitored. In addition, when Inderal is prescribed for angina pectoris, the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If Inderal therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute Inderal therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

IN PATIENTS WITH THYROTOXICOSIS, possible deleterious effects from long term use have not been adequately appraised. Give special consideration to propranolol's potential for aggravating congestive heart failure. Propranolol may mask the clinical signs of developing or continuing hyperthyroidism or complications and give a false impression of improvement. Propranolol should be withdrawn slowly, since abrupt withdrawal may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which after propranolol the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

IN PATIENTS UNDERGOING MAJOR SURGERY, beta-blockade impairs the ability of the heart to respond to reflex stimuli. Except in pheochromocytoma, propranolol should be withdrawn 48 hours prior to surgery. In case of emergency surgery the effects of propranolol can be reversed by administration of beta-receptor agonists such as isoproterenol or levaterenol, but such patients may be subject to protracted severe hypotension. Difficulty in restarting and maintaining the heart beat has been reported.

IN PATIENTS PRONE TO NONALLERGIC BRONCHOSPASM (e.g., CHRONIC BRONCHITIS, EMPHYSEMA) administer with caution, since propranolol may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta-receptors.

DIABETICS AND PATIENTS SUBJECT TO HYPOGLYCEMIA Propranolol may prevent the appearance of premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia, especially in patients with labile diabetes. A precipitous elevation of blood pressure may accompany hypoglycemic attacks.

USE IN PREGNANCY Safe use in human pregnancy not established. Embryotoxic effects have been seen in animals at doses about 10 times the maximum recommended human dose.

PRECAUTIONS

Patients receiving catecholamine depleting drugs such as reserpine should be closely observed if propranolol is administered, since it may occasionally produce hypotension and/or marked bradycardia resulting in vertigo, syncopal attacks, or orthostatic hypotension.

Observe laboratory parameters at regular intervals. Use with caution in patients with impaired renal or hepatic function.

ADVERSE REACTIONS

Cardiovascular bradycardia, congestive heart failure, intensification of AV block, hypotension; paresthesia of hands, arterial insufficiency, usually of the Raynaud type, thrombocytopenic purpura. **Central Nervous System** lightheadedness, mental depression manifested by insomnia, lassitude, weakness, fatigue, reversible mental depression progressing to catatonia, visual disturbances, hallucinations, an acute reversible syndrome characterized by disorientation for time and place, short term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics. **Gastrointestinal** nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis. **Allergic** pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress. **Respiratory** bronchospasm. **Hematologic** agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura. **Miscellaneous** reversible alopecia. Oculomucocutaneous reactions involving the skin: serous membranes and conjunctivae reported for a beta-blocker (practolol) have not been conclusively associated with propranolol. **Clinical Laboratory Test Findings** Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

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Reference: 1 Freis, E.D. Hypertension (Suppl. II) 3:230 (Nov.-Dec.) 1981

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A RATE OF EMERGENCY

Everyone wants to know why medical care costs continue to rise at such persistent, disproportionate and alarming rates. Inflation, tax burdens, technological sophistication, malpractice activities and competition levels are commonly perceived and accepted as contributing factors, as they should be. However, statistical appraisals of the collective effects of all apparent influences fall short of fully explaining the intolerable levels reached by today's costs for medical care.

Suffering an illness or an injury today literally strikes terror in the lives of our patients, irrespective of their age, condition, diagnosis or resources. The cause of the terror is not the nature or implications of the disability but the potential financial disaster which looms behind the bills for diagnostic and therapeutic services arising from the disability. Even the best insurance programs cannot deliver the sought-for invulnerability to bankruptcy.

The specter of the grim reaper still carries a long-bladed scythe but today its handle is a dollar sign.

Is it possible that some relatively obscure factors, powerful but unappreciated, are contributing to the steady escalation of medical-care costs? Are there missing links in the etiology of the ascension? If there are, it is terribly

important that they be identified and, if possible, modified or neutralized. The problems our nation faces because of medical-care expenses are multiplying and have achieved levels of great urgency. Solutions must be found quickly and they must be effective if we are to avert a monumental national disaster. And it is elementary that problems must be identified wholly and accurately before their effective solutions can be designed.

To follow will be a series of editorials devoted to the search for obscure factors which, in my personal opinion, might be exerting powerful pressures in the upward march of medical-care costs. The issue is so vital and solutions are so imperative as to justify the dedication of our total effort, far beyond this single page in fewer than a half-dozen issues of our journal. But it is all I have to offer and I will do my best. With your help, I can promise that my best will become better.

Let me know what you think are the forces — obscure or obvious — behind the high and rising costs for medical care. Jot down your thoughts, describe your feelings in a letter and mail it to me. With your permission, we'll publish them. Or, if you have the urge, I invite you to author a guest editorial to publish in this series dealing either with an element of the problem or your suggested remedy for it.

As you already know, I need all the help I can get.

MRJ

We enjoy the privilege of belonging to a respected profession, and one of the oldest and most learned. Various polls taken over the country during the past several years have indicated a slow but definite decline in the public perception of medicine as a profession, and the trust and faith held by the public in our profession. This fact concerns us all and deserves some valuation as to its cause and what can be done about it.



The word *profession* has multiple definitions, and a single terse and accurate definition cannot be made without qualifying it, and the qualifications of a profession are many. The first and most basic is to serve the community according to its needs without pursuing income as a primary motive, and to give this service with expert understanding of the best way to achieve a goal. The efficiency of the profession is then an exponent of the individual member; he possesses special knowledge and skills not available to those served; his service is essential to the life, health and well being of the patient and is usually given with the patient under duress. There is restricted entry into a profession; it sets its own criteria for membership, prescribes education, licenses itself, has its own code of ethics, and polices itself. The learned professions of divinity, medicine, and law are considered to be the modern true professions, in contrast to other professionals, such as professional accountants, business managers, engineers, academic professors, and many others, who perform for money without all the restrictive qualifications given above.

What, then, is the source of the apparent decline in public regard and respect for our profession? No doubt many factors are in operation here, but economic ones seem to be of

much importance. The complexities of urban society and the socioeconomic changes under way have produced a great demand for efficiency and equity in the delivery of medical care. Neither of these are compatible with a profession devoted to quality care and expert understanding of the best way to achieve a therapeutic effect for the patient. Budgetary constraints and the goal of the profession to treat all patients in the best possible way, as individuals, negate this demand as it applies to a true profession. Medical specialization and the sometimes attendant lack of communication with patient and family, together with poor or unexpected results, produce dissatisfaction and a desire for retribution or revenge on the part of the patient or his family, and leads to loss of respect for the profession. Physicians are often seen as seeking a profit, rather than seeking to serve, and are soon relegated in the patient's mind to the status of the professional offering his services for money. A lack of personal dedication on the part of the physician may be perceived by the patient if there is inadequate response to his personal appeals at any time, and the physician's financial success breeds contempt for his profession. One might conclude that the old aphorism, "Take care of the patient, and he will take care of you," has been long forgotten.

To regain the professional image of our profession is a task worthy of strong effort. It will require a universally accepted and improved code of behavior of our individual members, improved methods of surveillance of professional ethics, and more appropriate application of penalties to our members. The general lack of cultural goals in our current society is reflected in the degradation of our professionalism and will require a general return to the concept of service greater than self for correction.

Is the goal of return to the true ideal of our profession worth the effort? The joy of our profession does not lie in monetary gain, but in the sense of accomplishment and in our aid to suffering humanity. Again, the individual physician must search his conscience and arrive at the correction processes he must endure to accomplish improvement of our professional image.

John A. Montoya M.D.

Hypertension and Salt

Ruth Jiles, MPH
Willis L. Owen, PhD

The literature relating salt to hypertension is reviewed and evaluated. Inconsistencies in the literature are noted. Directions for future research are explored.

Sodium toxicity in animals and in man has been a highly controversial subject for at least four decades. There is no question that salt can be deleterious, and even fatal, when consumed in very large amounts, and the chain of events is of such a nature that there is little doubt about cause and effect. Ambard and Beaujard¹ were among the first to suggest that low-salt diets would lower the blood pressure of hypertensive subjects. Because it was low in salt, Kempner's² rice diet had antihypertensive effects. With these basic ideas in mind, studies were begun to investigate the role of salt in essential hypertension. Animal studies had shown that salt loading would produce a rise in

blood pressure, but whether this would hold true in humans was a question.

Low Sodium Diet Studied

Gollman³ studied six hypertensive patients in a rigidly controlled hospital environment. The diets of these patients were manipulated so that the daily intake of sodium was less than one gram. Two of the six patients' blood pressures declined to essentially normal levels and promptly rose again to pre-treatment levels when 20 grams of sodium chloride (eight grams of sodium) were added to the daily diet. Cessation of the use of this added sodium chloride again resulted in a decline in the blood pressure. A third patient exhibited a decline in blood pressure, but did not approach normal blood pressure. The fourth patient showed no decline of blood pressure with salt restriction. The fifth patient had carcinoma of the liver and showed an adverse effect to salt restriction. The sixth patient was "moribund from uremia" and died within three days of the onset of sodium restriction. This was the beginning of the hypothesis that there are "salt-sensitive" and "non-salt-sensitive" individuals.

Corcoran⁴ *et al* included 14 inpatients in their study of controlled sodium restriction. Four of these patients had malignant hyper-

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tension, and two other patients had obtained remissions of the malignant syndrome by drug therapy before beginning diet therapy. Initially a control period was undergone for two to fourteen weeks. Following the control period several diets were used in assessing the value of sodium restriction for treatment: (a) a 0.2 gram sodium diet in which the protein was made up in part in Lonolac; (b) the same diet as above with added tablets of sodium chloride; (c) the rice diet by Kempner; (d) the Kempner rice diet with protein added in the form of Lonolac; (e) a diet consisting of two grams of sodium; and (f) the rice diet with supplementary protein as Lonolac followed by the rice diet plus Lonolac diet with 0.2 grams of sodium. Blood pressures were measured in patients at rest every morning and evening.

Urine sodium content was measured daily. Urinary sodium content averaged less than 0.5 grams daily during periods of restriction and 1.75 grams during the control (range 0.2 grams to 5.0 grams). There was no significant change in nine of the 14 patients' blood pressures during sodium restriction. Five patients' blood pressures were decreased during the period of restriction. Corcoran (1951) then observed 13 outpatients on: (a) the 0.2 gram sodium diet; (b) the rice diet; and (c) the 0.5 gram sodium diet.

"There is no question that salt can be deleterious, and even fatal, when consumed in very large amounts"

The low sodium diets were instituted for four to six weeks of control observation after which the patients were given six grams of sodium chloride daily. The six grams of sodium chloride tablets were then exchanged for placebo tablets which were later withdrawn. Blood pressures were taken with patients at rest in the sitting position. Twenty-four-hour urine specimens were collected weekly or biweekly and analyzed for sodium content. Only three patients showed consistent low urine sodium content during the restriction

period. This indicates the inadequacy of dietary control in the outpatient group. Two other patients' urine showed that they sometimes did not follow the guidelines but calculations were made to determine the effect of restriction. Two of these five patients responded to the sodium restriction by decreased arterial pressures.

"It was suggested that the more obese person, in eating more food, also ate more salt and hence was more hypertensive"

Dahl⁵ *et al* observed 12 adult patients in a metabolic ward of the Brookhaven Laboratory Research Hospital. Eleven of these patients had essential hypertension with no renal disease. The 12th patient was obese (394 pounds) and mildly hypertensive (164 mm Hg systolic and 102 mm Hg diastolic). The other 11 patients were also overweight, with an average weight of 207.2 pounds. Initially patients were placed on a control low-sodium diet (115 mg of sodium per day) with low-sodium protein (Lonolac) for four-to-seven weeks. After the control period all patients were placed on the following diets: (a) a low-sodium, low-calorie reducing diet which contained 105 mg of sodium; (b) a low-sodium, high calorie diet; (c) a high-sodium, low-calorie diet which contained 10 grams of salt; and (d) a high-sodium, high-calorie diet which contained 10 grams of salt. Reduction of weight in eight obese hypertensive patients was associated with a fall of blood pressure. The patient who was grossly overweight (12th) did show a decrease in blood pressure with weight reduction alone. The conclusion was that the decrease in blood pressure appeared to be closely associated with restriction of salt intake. The most obese subject was thought to be more sensitive to salt restriction than the others. It was suggested that the more obese person, in eating more food, also ate more salt and hence was more hypertensive; in reduction, salt as well as calories were reduced, and it was the salt restriction, not the caloric restriction, that was the effective agent in lowering the blood pressure.

Population Groups Surveyed

Using 24-hour urinary excretion Dahl⁶ examined average salt intake of Alaskan Eskimos, Marshall Islanders, Northern American men and Japanese farmers. Except for the Eskimos and Marshall Islanders, comparison with earlier estimates of actual need indicated a considerable excess of intake over normal requirements. Dahl also observed that primitive Bolivian Indians and Eskimos, who normally add no salt to food, disliked the taste of it initially but could grow to like it quickly. It was further noted that patients who reduced their daily intakes well below 0.5 grams for months or years had no salt craving. Dahl therefore concluded that salt appetite is acquired and warrants no serious consideration when investigating salt requirement. Dahl concluded that a high degree of association existed between average levels of salt intake and prevalence of hypertension. It was further concluded that all subjects who consumed the same amount of salt would not have the same probability of developing hypertension because of variations in individual biological responsiveness. Thus it was stated that the possibility that the interaction between hereditary susceptibility and dietary salt is the common means by which essential hypertension develops.

Prior⁷ surveyed two Polynesian populations of the same ethnic origin. One population consisted of the entire adult population of the isolated coral atoll of Pukapuka in the Northern Cook Islands. The other group was a sample of adults who had lived for at least ten years under town conditions in Avarua in the Southern Cook Islands. Data on total food consumption and use of salt in cooking and at the table were collected by the 24-hour recall method and by household dietary surveys. Casual

samples of urine were collected from all participants. Forty-eight-hour urine collections were made in subsamples consisting of 51 Avaruans and 60 Pukapukans. The Avaruans who consumed seven-to-eight grams of sodium daily showed a rise of systolic blood pressure with age that became more rapid with increasing age. The Pukapukans consumed 2.9-to-4.0 grams of sodium daily. The subsamples showed no significant differences in urinary sodium output between the sexes within populations, but the differences in output between the populations were highly significant ($p < 0.001$). The mean sodium output for the Avaruans was 12.6 grams/24-hour urine sample; the mean value for the Pukapukans was 7.29 grams/24-hour

"... Primitive Bolivian Indians and Eskimos, who normally add no salt to food, disliked the taste of it initially but could grow to like it quickly."

urine sample. The Avaruans had higher average sodium output and higher blood pressures than the Pukapukans. The dietary survey as well as the 48-hour urine collection by the subsamples indicated that Avaruans consumed more sodium than the Pukapukans. The need for more urine samples to smooth out day-to-day and seasonal variation in sodium output was expressed.

Mark⁸ *et al* studied six subjects in order to assess the effect of sodium intake on arterial pressure and forearm vascular resistance. These subjects were diagnosed as borderline hypertensive because their blood pressures were intermittently above 150/90 mm Hg. The subjects were maintained on a high-sodium diet for ten days (24 grams of sodium per day), followed by ten days of low sodium intake (0.5 grams of sodium per day). Five of the six subjects experienced a decrease in forearm blood flow and an increase in forearm vascular resistance and arterial pressure during the high sodium diet phase. There was a decrease in arterial pressure and forearm vascular resistance and an increase in forearm blood flow in these patients during the low-sodium-diet

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phase. This is consistent with Dahl's theory about sodium.

In a follow-up study, Miall⁹ studied a random sample of 250 families of the general population of Rhondda Fach. Questions pertaining to salt intake were asked. Subjects were classified as:

- (1) "high salt intake," those who added extra salt to a cooked meal before tasting it;
- (2) "medium salt intake," those who added extra salt to a cooked meal occasionally after tasting it; and
- (3) "low salt intake," those who do not normally take additional salt with a cooked meal.

A larger proportion of men than women were in the high salt intake group. Women in the high salt intake group showed lower systolic and diastolic blood pressure than those who were medium and low salt intake groups. The blood pressures of women in all groups were compared with their blood pressures from the original study. The blood pressures of the women in the high salt intake group had increased less in four years than blood pressures of women in the low and medium salt intake group. Sodium output in a 24-hour urine specimen was calculated for four groups of post-menopausal women in the sample. The hypertensive women in this sample excreted less sodium than those with low pressure, regardless of the salt intake group in which they were classified. There was no difference in sodium output between hypertensives who did and hypertensives who did not add extra salt to their diet. There was a difference, which approached significance, ($0.10 < p < 0.20$) between the two groups of normotensive women.

Hypertensives' Reactions Measured

Gros¹⁰ *et al* divided 18 subjects into three groups. Group 1A consisted of seven labile hypertensives or mild untreated hypertensives, whose mean lying diastolic pressure was 89 mm Hg. In addition, three normotensives were included in this group. Subjects maintained their usual salt intake and recorded body weight each morning before breakfast for two-to-nine weeks. Six additional grams of salt plus six grams of inert filler were ingested daily for the two-to-nine weeks. Occasional 24-hour urine specimen determinations

were made. Group 1B included the same ten individuals from group 1A, who, after the salt-loading period, were given a mixture of six grams of salt plus six grams of potassium chloride to be ingested daily for four weeks. Group 2 was made up of eight patients with mild hypertension whose average lying morning systolic pressure was 103 mm Hg. Hydrochlorothiazide medication was withheld for two weeks or more, while the patients maintained a normal diet. After determination of

"Five of the six subjects experienced a decrease in forearm blood flow and an increase in forearm vascular resistance and arterial pressure during the high sodium diet phase."

baseline blood pressures the patients were given 50 milligrams of hydrochlorothiazide daily for four weeks. Next the hydrochlorothiazide was continued and five grams of salt were added to the diet daily for four weeks. Group 3 consisted of five patients from Group 2 who had normal or slightly elevated blood pressures while receiving hydrochlorothiazide therapy. These patients also had hypokalemia. These patients were given a mixture of five grams of sodium chloride plus five grams of potassium chloride daily, for two weeks, while continuing drug therapy. Then the patients were given the five grams of sodium chloride only for two weeks while continuing drug therapy. During the last two weeks, the diet contained the five grams each of sodium chloride and potassium chloride. Serum potassium was determined after each regime. Neither Group 1A nor Group 1B exhibited a significant change in blood pressure after the addition of the six grams of salt or six grams of salt and potassium chloride mixture. In the eight patients who were receiving 50 mg hydrochlorothiazide daily, the mean diastolic pressures went down in five, up in one and remained stable in two when compared with the mean pressure during the baseline period. The addition of five grams of sodium chloride resulted in the lowering of mean blood pressure in three patients, who had not shown a lowering of blood pressure while taking therapy alone; a further lowering of pressure in one of

the five patients, who had a lowering of blood pressure with hydrochlorothiazide; and an increase of diastolic blood pressure in one patient of this five. Hypokalemia was unchanged in three patients but was corrected in two patients. In Group 3, which consisted of the five hypokalemic patients, four patients' blood pressures did not change, whereas an elevation was noted in one. One of the noncorrected hypokaleemics became more hypertensive. Gros¹⁰ *et al* concluded that sodium chloride alone does not increase blood pressure.

Siblings Sampled

Langford and Watson¹¹ identified siblings and half-siblings from a previous survey in Hinds County, Mississippi. A proportionate stratified random sample of black female sibling pairs was chosen for further study. Medical history, dietary history and history of residence were obtained. A 24-hour urine specimen was collected and analyzed for sodium, potassium and creatinine. The correlation coefficient of sodium excretion between 99 pairs of sisters was 0.427. The correlation coefficient of salt-taste threshold between 116 pairs of sisters was 0.445. In comparison, the correlation of sodium excretion and salt-taste threshold was as close as the correlation for height and other anthropometric data, and closer than blood pressure. Langford and Watson noted that the possibility of genetic ability to taste salt might affect the correlation coefficient, but they do not believe this to be true in this situation. The authors also concluded that there was nothing in these data to implicate sodium as a causative factor in the development of hypertension.

Prisoner Study Inclusive

White male prisoner volunteers between the ages of 24 and 47 years participated in a rigidly controlled study conducted by Kirkendahl¹² *et al*. These men were determined to be healthy by medical histories, routine physical examinations, urinalyses, complete blood counts, analyses of serum electrolytes, creatinine clearance, blood sugar determination and chest x-rays. All blood pressures were below 150/90 when measured on several occasions on at least three different days. Each subject was studied for a minimum of 12 weeks, subdivided into three periods of four weeks each. The dietary phases consisted of low sodium intake (0.58 grams of sodium per day), moderate sodium in-

take (12.35 grams of sodium per day), and high sodium intake (24 grams of sodium per day).

Twenty-four hour urine specimens were collected daily. Initially, daily excretion of sodium, potassium and creatinine was measured in a 24-hour urine aliquot. After the three months of the study, excretion was determined from daily collections pooled weekly from which aliquots were taken. There was no change in either systolic, diastolic or mean blood pressure, taken with the subjects supine or upright, during any of the three periods. Urine sodium increased from a mean of 0.58 grams per day on the low sodium diet to 18.06 grams per day on the high sodium diet. It was concluded that the stimulus may not have been applied long enough and that the individuals selected may have been salt insensitive.

Phased Program for Hypertensives

Reisin¹³ and co-workers studied hypertensive patients, some of whom were being treated. Three study groups were used in this study. Group 1 consisted of 24 hypertensives who were receiving no antihypertensive drug therapy. Group 2 consisted of 83 patients who were receiving regular antihypertensive drug therapy. Groups 1 and 2 were further divided into Groups 2a and 2b. Group 2a consisted of all patients from Group 1 plus 57 patients randomly selected from Group 2, a total of 81 patients. Group 2b consisted of the remaining 26 patients from Group 2. Patients in Group 2a participated in a weight-reduction program, whereas those in Group 2b did not. Drug therapy was not changed in any way throughout the study. The study was divided into three two-month phases: Phase I was the establishment of baseline weight and blood pressure without intervention. Phase II was the weight-reduction program, and Phase III was the maintenance of weight at the reduced level through an adjustment in the dietary regimen. Twenty-four hour urine specimens were collected in all three groups at the end of Phase II. Patients in Group 1 and 2a were maintained on stable caloric intake but were encouraged to eat freely of salt-pickled vegetables and other low-calorie salty foods. Normal blood pressure was defined as less than or equal to 140 mm Hg systolic and less than or equal to 90 mm Hg diastolic. Other definitions were: mild hypertension — 141 to 160 systolic and 91 to 104 diastolic, or both; moderate hypertension — 151 to 180 systolic or 104 to 114 diastolic, or

both; severe hypertension — greater than 180 systolic or greater than 114 diastolic, or both. All patients in Group 1 and 2a showed a significant reduction in weight (mean reduction was 23.1525 pounds, $p < 0.001$). Changes in the weight of Group 2b did not differ significantly

"Establishment of an acceptable line or point at which a person is diagnosed as hypertensive would eliminate the problem of establishing a definition of normotensive."

from zero ($p > 0.30$). There was a significant positive correlation between the reduction in blood pressure and reduction in weight in both Groups 1 and 2a. In Group 1 the correlation coefficient was 0.42 for systolic blood pressure ($p \leq 0.002$). In Group 2a the correlation coefficient was 0.24 ($p \leq 0.04$) for systolic and 0.30 ($p \leq 0.001$) for diastolic. The mean urinary sodium excretion was slightly higher in the two diet groups as compared to Group 2b. Due to the similarity of response in patients with or without antihypertensive drug treatment at all levels of initial blood pressure and the significantly positive correlation of the reduction in weight and in blood pressure, it was concluded that weight loss was the direct causative factor in the changes in the blood pressures in both groups.

Nineteen patients with idiopathic hypertension and normal renal function were studied by Kawasaki¹⁴ *et al.* Administration of all antihypertensive drugs had been discontinued for at least four weeks before the study. The basic diet taken by all patients contained four grams of potassium and 0.5 grams of sodium daily. Patients were observed for one week on this diet with an added average sodium intake of 5.8 grams of sodium chloride each day. Next, patients were studied for one week on a basic diet which provided low sodium intake. Finally, patients received the basic diet with 14 grams of sodium chloride added daily. All urine was collected throughout the study and analyzed for creatinine, sodium, and potas-

sium. On the seventh day blood was drawn and analyzed for plasma renin activity. Patients were diagnosed as hypertensive when two-thirds of their four-hour blood pressure values exceeded 140/90 mm Hg during the first six days of the average sodium intake diet. For comparative purposes mean blood pressure was determined on the sixth day of each regimen. Nine patients were classified as salt sensitive. Their average mean blood pressure increased from 105 mm Hg on the low salt diet to 120 mm Hg on the average salt diet to 124 mm Hg on the high sodium diet. Ten patients fell into the non-salt-sensitive group. The average mean blood pressures on the non-salt-sensitive patients were 114 mm Hg on the medium sodium diet, 104 mm Hg on the low sodium diet and 114 mm Hg on the high sodium diet. The mean increment of blood pressures between the low salt and high salt values differed significantly ($p < 0.001$) between the two groups. Salt-sensitive patients gained significantly more weight ($p < 0.02$), with a mean gain of two pounds, than the non-salt-sensitive patients, who experienced a mean gain of 0.44 lbs. Kawasaki¹⁴ summarized the results by observing that the non-salt-sensitive patients excrete more sodium than the salt-sensitive patients on high- and low-sodium diet and that salt loading causes less weight gain in non-salt-sensitives than in salt-sensitives.

Sodium Excretion Values Compared

The study by Morgan, Carney and Wilson¹⁵ describes the sodium excretion values of both hypertensive and normotensive subjects. Sodium excretion was estimated from the 24-hour urine specimens of 400 mildly hypertensive individuals (diastolic 95 to 110 mm Hg) and 50 normotensive people. An additional group of 150 hypertensive males (diastolic greater than 110 mm Hg) also participated in 24-hour urine specimen collections. The urinary sodium excretion of the normotensives showed a normal distribution around a mean 6.4 grams but the other two groups showed a skewing to the right with a mean of 8.58 grams for the mildly hypertensives and 10.73 grams for the hypertensives. Two groups, each of 26 hypertensive patients, were then studied. The patients of one group were advised that they should reduce sodium intake to four grams per day. The control group was given no instructions to reduce sodium. The blood pressure of the sodium-restricted group was compared

with the control before the study and six months after the therapy began. The initial blood pressure did not differ significantly ($p>0.1$). After six months the blood pressure of the control group was not significantly different from their original pressures. The blood pressure of the salt-restricted group was significantly less than their initial reading; with a mean decrease of ten mm Hg systolic and six mm Hg diastolic. Another group of 12 patients who were being treated for hypertension had changes made in their diuretic therapy and salt intake. The regimen lasted for 10 weeks. Sodium restriction reduced the standing and supine systolic and diastolic blood pressures. The decrease in pressure induced by the diuretic agents with or without sodium restriction was significant, and the decrease in blood pressure correlated with the decrease in body weight ($p<0.01$).

McDonough and Wilhelm¹⁶ observed the effect of salt loading on one normotensive adult male. Control readings of his blood pressure were taken for 23 days. Table salt was given in the range of 25-to-60 grams per day for the 23 days following the control period. During the 23 days of salt loading there was a gradual "highly significant" increase in both systolic and diastolic pressures coupled with an increase in body weight. The salt loading was discontinued after 23 days and the blood pressure and body weight promptly fell to their pre-loading values.

Tribal Diets Examined

Truswell¹⁷ *et al* looked at blood pressures of !Kung bushmen. Medical histories, blood pressures and ages were obtained for 800 bushmen. Six bushmen contributed 24-hour urine specimens as did two investigators, who served as controls. Later, another 24-hour urine specimen was taken from four of the previous six bushmen and from three controls. The bushmen had a strikingly low sodium and chloride content in the 24-hour specimen. It was concluded that one of the reasons the bushmen did not experience hypertension was that they consumed low-sodium diets. Their diets, according to Truswell, provided little more sodium than was recommended to hypertensive individuals before oral diuretics were available.

A study was conducted by Page¹⁸ and co-workers among six Melanesian tribes in the

Solomon Islands: Nasio, Naigovisi, Lau, Baegu, Aita and Kwaio. Physical health and nutrition were good in all six groups, and clinical evidence of coronary heart disease and atherosclerosis was absent. Except where tribal taboos prevented it, urine and stool samples were obtained. A total of 2,586 persons were studied; 1,390 of them were over age 15 years. Average salt intake per day was calculated for each tribe and values were as follows: Nasio 2.94 to 7.65 grams; Naigovisi 2.94 to 7.65 grams; Lau 8.82 to 13.53 grams; Baegu 0.58 to 1.76 grams; Aita 0.58 to 1.76 grams; and Kwaio less than 1.17 grams. Three of these tribes (Lau, Nasio, and Naigovisi) show rising blood pressure with age along with a decrease in weight with age. These three tribes also had higher salt intakes with more western-type diets. This high intake of salt is suspected of being the reason for increases in blood pressure in these populations.

Salt Intake Differences Questioned

Malhotra¹⁹, in an attempt to verify a previously observed significant difference in the prevalence of hypertension between north and south India, studied employees of three railway centers in the north and two railway centers in the south. Males aged 20 to 58 years in Delhi in the north and Madras in the south were matched for socioeconomic status, the nature of their work and wage brackets. Participants from other cities in the north included 296 accounting clerks from Ajmer and 1,000 employees in different trades from Ratlas; in the south 114 sweepers from Waltair were included in the study. Of 278 hypertensive persons, 208 were age matched with 208 controls from the original population in Delhi and Madras. Mean systolic and diastolic pressures were higher by five mm Hg or more in the south Indians than in the north Indians in each age group. In the individual populations, there were no differences between the mean arterial pressures in different age groups. Hypertension, defined as systolic above 160 mm Hg and diastolic above 95 mm Hg, was present in 15.2% of the south Indians and 6.2% of the north Indians. South Indians consumed an average of eight grams of sodium daily and north Indians consumed 12-15 grams of sodium daily. It was concluded that the prevalence of hypertension in these populations was not related to age, occupation, body weight, smoking, dietary salt intake or psychological factors.

Langford and Watson²⁰ selected a proportionate random sample of black females from a previous high school study in which 99% of the high school population of Hinds County, Mississippi participated. These women were studied in their homes. Three blood pressure determinations were made for eight consecutive days. Each of the 100 women also collected a 24-hour urine specimen for six consecutive days. Sodium excretion was not correlated with blood pressure. Analyses of the dietary histories suggested that those with pressures less than 105 mm Hg systolic consumed more calcium than those with pressures above 125 mm Hg systolic. Langford and Watson concluded that sodium differences seemed "inadequate to explain the difference found."

Difficulties of Study Comparisons

In all phases of research it is very important to review, compare and contrast previous studies. Studies concerning hypertensives are often hard to compare due to: (1) definitions of hypertension and of normal blood pressure; (2) lability and variability of blood pressure; (3) variables which affect blood pressure such as age and weight; (4) sampling problems; and (5) ability to measure suspected etiological factors.

The definition of hypertension has caused much controversy. Most researchers seem to agree that hypertension is a qualitative entity. However these investigators have not been able to agree upon the point at which blood pressure is no longer normal. Blood pressure levels reported as hypertension in this paper are summarized in Table 1. Problems of definition are compounded by researchers who do not specify what their criteria are for defining hypertension.

Similarly, persons are diagnosed as normotensive at various levels. Generally, clinicians use the standard 120/90 mm Hg as normal; anyone who falls at or below that pressure, except extremely low cases, are diagnosed as normotensive. Gros *et al*¹⁰ defined mildly hypertensive subjects but failed to do the same for normotensive participants. Kirkendahl¹² *et al* implied that they considered 150/90 as normal because they described their prisoner volunteers as "healthy" below that level.

TABLE 1

Blood Pressure Readings Used to Separate Hypertensive from Normotensive by Various Authors

Separating Pressures (mm Hg)	Author
164/102	Dahl ⁵
150/90	Mark ⁸
103 systolic	Gros ¹⁰
150/90	Kirkendahl ¹²
140/90	Reisin ¹³
140/90	Kawasaki ¹⁴
95 diastolic	Morgan ¹⁵
160/95	Malhotra ¹⁹

Establishment of an acceptable line or point at which a person is diagnosed as hypertensive would eliminate the problem of establishing a definition of normotensive. Further, this would allow greater comparisons of results from various studies.

Blood pressure is not a fixed quantity. There are many stimuli which produce temporary decreases or increases in blood pressure. Due to this lability and variability of blood pressure, a single recording of blood pressure could be misleading. Prior⁷ based his Polynesian study on one blood pressure reading. Truswell's¹⁷ study among the !Kung bushmen was based on one blood pressure reading. Of course in population studies where large numbers of persons are surveyed, one must weigh the value of obtaining several readings for fewer subjects versus taking one reading from many subjects.

Sampling problems are often encountered in scientific research. One of the most difficult decisions is how many subjects to use. One extreme has been reviewed in the McDonough and Wilhelmj¹⁶ study in which only one normotensive person was studied. Gollman³ studied six patients as did Mark⁸ *et al*. Although Truswell¹⁷ *et al* surveyed and reported on blood pressures of 152 bushmen, analyses of sodium excretion were based on only six subjects and three controls. The hypothesis of salt-sensitive and non-salt-sensitive individuals makes it necessary to choose a reasonably large sample in order to be sure that each group will be represented.

Other sampling problems have been grouped under measurement problems and errors. These include decision bias; repeated measurement, replication of previous pressure, and

ability to separate and measure suspected etiological factors.

Efforts have been made to develop a standard method of obtaining blood pressure measurement. The 1967 revision of the American Heart Association Standards recommended use of Phase IV diastolic levels. Despite this recommendation most American studies have reported fifth phase diastolic whereas most British studies have reported fourth phase [Armitage²¹ *et al*, Langford²² *et al*, and Watson³³].

Serum sodium in most studies has been inferred from sodium intake or sodium excretion. It is well known that reliable 24-hour collections of urine are difficult to obtain and evaluate in all but captive populations and that dietary recall histories seem unreliable in predicting sodium excretion. The imprecision of measurement can be partially compensated for by use of larger population samples. However, according to Watson and Langford,²⁴ the degree to which a single day's excretion reflects the usual or habitual excretion is currently unknown.

"If there are salt-sensitive and non-salt-sensitive persons, then we must decide how to get enough patients or subjects so as to ensure representation of both these groups."

The length of the presence or absence of the stimulus also affects the response. The lengths of the studies have varied greatly. Mark⁸ studied his borderline hypertensives for ten days. The prisoner volunteers observed by Kirkendahl¹² were under observation for four weeks. The observation period of Kawasaki¹⁴ *et al* was one week. Morgan's¹⁵ two studies lasted six months and 10 weeks, respectively.

Uniform Procedures Needed

It is apparent that much effort must be made to utilize uniform procedures in studies of this nature before we can fully appreciate just how far we have come and how much further we

must go. The first criterion is to establish some acceptable dividing line between normotension and hypertension. The next decision is how many blood pressure readings are necessary to get an accurate estimate of the true blood pressure. If there are salt-sensitive and non-salt-sensitive persons, then we must decide how to get enough patients or subjects so as to ensure representation of both these groups. Some consideration must be given whether to use sodium excretion or sodium ingestion in studies of sodium and hypertension. The relationship between sodium and other electrolytes must also be taken into consideration. How long should the sodium restriction or loading period last? Should meaningful results be based on one week of observation, or would a longer or shorter period be adequate? These are other questions which must be answered. With these ideals in mind, more compatible studies will bring us closer to logical solutions while helping us to more rapidly attack the public health problem of hypertension.

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The Clinical Significance of Antithrombin III Deficiency

Daniel H. Carmichael, MD
Carlan Yates, MD

Acquired or inherited antithrombin III deficiency may cause venous or arterial clotting. Unusual or unexpected thrombosis should suggest the diagnosis. The treatment includes indefinite Coumadin (warfarin) therapy.

The clinical importance of antithrombin III (AT III) deficiency as an isolated case or as a familial disease has been increasingly recognized in recent years. Its role in unexpected or unexplained venous or arterial thrombosis is well established.^{2, 4, 5, 9, 10} The following cases illustrate the nature of this problem:

Case 1

A 57-year-old white woman was seen in consultation because of cutaneous gangrene of the right thigh and rest pain. She had been treated with irradiation eight years earlier for stage III-B carcinoma of the cervix and subsequently developed lung and pelvic metastases. She was on no medication. An aortogram done at the Presbyterian Hospital in Oklahoma City on March 1, 1981 showed a complete occlusion of

the distal aorta with good runoff and reconstitution of the femoral arteries. The cause was felt to be arteriosclerotic because of the lack of any obvious cancer invasion.

Because of the recurrent pelvic tumor and the prior abdominal irradiation, a right axillo-bifemoral bypass graft was performed on March 2, 1981. Excellent results were obtained and the patient was discharged. She returned with a recent thrombosis of the graft on April 28, 1981. Femoral exploration and embolectomy were successful in restoring flow to the legs. An operative angiogram showed good distal runoff. She was placed on heparin and oral Coumadin postoperatively. As a result of Towne's article,¹⁰ the senior author obtained an antithrombin III level in July, 1981, which showed a functional activity at 23% of normal. The patient continued to take Coumadin and died from complications related to chemotherapy on July 20, 1981. Her liver functions were normal throughout her hospitalizations.

Case 2

A 44-year-old white female was admitted to Presbyterian Hospital in Oklahoma City on May 20, 1981. She had a two-day history of severe lower abdominal pain, tenderness, nausea, vomiting, and no bowel movements. She was taking no medications. At exploratory laparotomy a 25 cm segment of infarcted small bowel encased in multiple adhesions was

found. The mesentery was extremely thickened and the operative diagnosis was lymphoma with necrosis of the ileum or adhesions with strangulation. Postoperatively the patient deteriorated and the pathology report on the first specimen was mesenteric venous thrombosis. Re-exploration on the second postoperative day showed that 90% of the small

"AT III has been recognized as an important inhibitor of thrombin since the beginning of this century."

bowel had meanwhile died. This was resected and 5-6 cm of the proximal jejunum and 10 cm of the terminal ileum were anastomosed.

The patient had a stormy postoperative course, involving adult respiratory distress syndrome and bleeding gastric ulcers. She was discharged in August, 1981, on regular diet. She returned on October 15, 1982, with swelling of the right leg. A venogram showed a right femoral venous thrombosis. She was then placed on heparin. Antithrombin III levels by radio-immunodiffusion revealed a value of 12.5 mg/dl, with a normal range being 17 to 30 mg/dl. The level was determined again after discontinuation of heparin and the initiation of Coumadin several weeks after the leg thrombosis and again was found to be 12.5 mg/dl. After several more weeks on Coumadin, the antithrombin III level returned to normal, but

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in March, 1982, it was again low. Results of liver function studies were not suggestive of cirrhosis.

The patient's father and grandfather both died suddenly in their early forties of "coronary thrombosis." An uncle was treated for over eight years with Coumadin for chronic phlebitis. Other members of her family on her father's side had episodes of phlebitis or unexpected heart attacks at an early age. The patient's surviving children have normal AT III levels.

Discussion

AT III has been recognized as an important inhibitor of thrombin since the beginning of this century.⁸ Thrombin is a proteolytic enzyme that separates fibrinopeptides A and B from the alpha and beta chains of fibrinogen. The soluble fibrinopeptides then polymerize to form insoluble fibrin, which is the matrix of blood clots.¹ AT III is identical to the agent formerly known as heparin cofactor. Heparin acts by enhancing the activity of AT III, thus decreasing the amount and rate of clot formation. Besides inhibiting the formation of thrombin, AT III also inhibits activated factors VII, IX, and XII, and most significantly factor Xa. It is this anti-Xa activity of AT III which forms the rationale for the efficacy of low-dose heparin therapy.^{10, 11}

Reduced AT III levels are associated with predisposition to venous and arterial thrombosis and may account for many unexpected thrombotic episodes.¹⁰ Several families with this deficiency have shown an autosomal dominant type of genetic transmission.^{2, 4, 5, 9} Most familial cases of these thromboses are venous, primarily involving the femoral, axillary, or

"Reduced AT III levels are associated with predisposition to venous and arterial thrombosis and may account for many unexpected thrombotic episodes."

mesenteric veins, and sudden death has also been reported.⁴ The age of onset of thrombosis is typically in the second through the fifth decades, although teenagers and the elderly are not spared in these families.^{2, 4, 5} The incidence

of AT III deficiency in the general population in one in 2000, and approximately 2% of patients with venous thrombosis will have AT III deficiency.⁷ Patients deficient in AT III may be resistant to heparin therapy, with a lack of change in the partial thromboplastin time; this should be a clue to the diagnosis.¹⁰

Decreased AT III levels are also commonly observed in cirrhosis, since the liver appears to be the only organ in which AT III is produced.^{1, 3, 5} Thrombosis does not appear in

"The age of onset of thrombosis is typically in the second through the fifth decades, although teenagers and the elderly are not spared . . ."

cirrhotic patients to the same extent as in hereditary AT III deficiency because the synthesis of prothrombin and factor X is impaired, which greatly lowers the requirement for AT III.⁵ With normal levels of coagulants, higher levels of AT III are required in order to maintain the normal fluidity of blood. A lowering of the level of circulating pro-coagulants provides improvement in the clotting equilibrium in patients with AT III deficiency. AT III levels are also lower in some patients with cancer,¹ as in our first case, and in some patients with an acute thrombosis or disseminated intravascular coagulation.^{6, 8}

Estrogen therapy, as well as oral contraceptives, may result in a lowering of AT III levels.⁴ The same findings are reported in pregnancy and in post-partum women as long as a week after delivery.¹ This may implicate AT III deficiency in the increased incidence of thrombosis in pregnancy and in women on oral contraceptive agents.

When unexpected thrombosis occurs in a patient who has had a vascular procedure, ie, clotting in the absence of technical errors or poor runoff, AT III deficiency should be suspected.¹⁰ Towne has suggested that a thrombotic synergism may exist between AT III deficiency and arteriosclerosis.¹⁰ Heparinized patients who have unexplained clotting should also have platelet counts determined since an occasional patient may react to heparin by platelet aggregation and platelet emboli. This may lower platelet counts. This

"white clot" syndrome may give rise to thrombotic events identical to those seen in AT III deficiency.¹⁰

AT III levels are measured by biological activity or immunoassay. Functional activity below 80% of normal may be clinically significant.⁹ Measurement of AT III concentration by immunoassay is more specific, but there is a possibility that this measurement does not reflect total biologic activity. In most studies of congenital AT III deficiency, these two tests are closely related,⁶ but exceptions have been reported in which familial thrombosis was associated with functional AT III deficiency and normal immunoreactive AT III.⁹ Another exception has been shown in some women taking oral contraceptives who have disproportionately low functional values when compared to the immunologic assay.⁶ Perhaps both tests should be done in appropriate patient evaluations.

Treatment

Prophylactic treatment of patients with known deficiencies of AT III without thrombotic events should cover impending surgery, infection, pregnancy and prolonged bedrest,² although some authors recommend lifelong oral anticoagulation.¹ In patients with vascular thrombosis and proven AT III deficiency, Coumadin is the drug of choice and it must be continued indefinitely.¹⁰ It makes little sense to use heparin as the sole anticoagulant since it requires AT III.¹⁰ For unknown reasons Coumadin treatment may result in an increased concentration of AT III, and this may complicate the diagnosis if the patient is not previously known to have AT III deficiency.⁵

Patients deficient in AT III who have recently undergone or who must undergo surgery probably should be treated with both heparin and fresh frozen plasma.¹⁰ This provides enough AT III so that normal states of coagulation are obtained and that heparin may then act as an anticoagulant. Towne recommends five days of fresh frozen plasma (two units twice a day) following operation and during the institution of per-oral anticoagulation.¹⁰ Dextran has also been advocated.²

Conclusion

All patients with unexpected or unusual venous or arterial thrombosis should be evaluated for possible AT III deficiency, par-

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ticularly if there is a family history of thrombosis. Routine measurement of AT III levels in patients about to undergo vascular surgery may be indicated.

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Report of the American Medical Association Council on Scientific Affairs

*This report was selected and reprinted upon the suggestion of
John A. McIntyre, MD, President of the OSMA.*

Subject: Prescription of Tranquilizers and Antidepressants for Women (Board of Trustees Report X, I-80)

Presented by: William D. Dolan, MD, Chairman

Referred to: Reference Committee E (John J. Gaughan, MD, Chairman)

In Recommendation 5 of Board of Trustees Report X, "Ad Hoc Committee on Women Physicians in Organized Medicine," which was referred to the Board at the 1980 Interim Meeting, the AMA was requested to take a more active role in responding to the issue of prescribing tranquilizers and antidepressants for women. This report discusses the terminology, possible causes, sex incidence, and therapies available for selected psychiatric disorders involving anxiety and/or depression.

Whether diagnoses, prescription audits, or individual questionnaires are utilized to determine either prescription drug use or frequency and intensity of psychiatric symptoms, more women are diagnosed and treated for anxious and depressive symptomatology (psychic distress) than men. Ratios of at least 2:1, and as high as 8:1, depending upon the study and age group of the patients have been reported. This conclusion is confirmed whether inpatients or outpatients in clinics, mental health centers, or private practice are chosen for

study.¹⁻⁹ The incidence of psychic distress also is greater for women surveyed among non-patient residents of urban or rural communities.⁷⁻⁸ If such self-reporting among men and women is valid, the difference probably cannot be ascribed only to the interpretation that women seek medical help for psychic distress more often than men. Psychosocial factors play an important causative role, because the difference between the sexes disappears in the presence of high-risk statuses, ie, the unmarried, those in low socioeconomic groups, and blacks.

Drug Nomenclature¹⁰ And Indications

The historical drug class term, tranquilizer, designates one of two categories of drugs: *Major tranquilizers* refers to a class of drugs that is now more often called antipsychotic drugs. The advent of these drugs 25 years ago, and similar drugs developed since that time, revolutionized the treatment of schizophrenia. Although they are not curative, therapy with antipsychotic drugs permits many patients to remain functional in the community rather than institutionalized. *Minor tranquilizers* refers to drugs such as hydroxyzine, meprobamate, a few of the barbiturates (butabarbital, phenobarbital), and the benzodiazepines. A use common to all of these agents is treatment of anxiety and, accordingly, they are now more

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often designated by the more specific term "anxiety agents" rather than minor tranquilizers.

**This report is not intended to serve as a standard of medical care: standards of medical care are determined locally, are constantly subject to change and are established on the basis of all the several facts of the individual case.

Past House Action: I-80:45-71

The *antidepressant drugs* (eg, tricyclic and tetracyclic antidepressants, monoamine oxidase inhibitors) are quite distinct from the antipsychotic and anxiety drugs. Their use is principally limited to those psychiatric disorders classified as major depressive disorders in the 1980 revision of the *Diagnostic and Statistical Manual III (DSM III)* published by the American Psychiatric Association.¹¹ In addition, the monoamine oxidase inhibitors (isocarboxazid, phenelzine, and tranylcypromine) are used alternatively in selected cases of anxiety when moderate to severe depression is present with the anxiety, ie, phobic disorders. The *antimanic drug*, lithium, is used specifically for the management of the mania that often alternates with depressive episodes in bipolar disorders (manic depressive).

The anxiety and antidepressant drugs are the only psychoactive drug classes that this report addresses. The antipsychotic drugs are not included even though they are still occasionally referred to as major tranquilizers, because they are rarely indicated in the management of uncomplicated anxiety; they also have a very low abuse potential. Stimulant drugs such as amphetamines are not included because their role in the treatment of depression is very limited and remains controversial.

Anxiety

Definition and Etiology:

Anxiety is a normal alerting mechanism that heightens awareness and is especially prominent during the anticipatory phase of emotional excitement. Such anxiety is often present with a desirable feeling of excitement in participants or observers engaged in work or play-related competitive activities or the performing arts. Undesirable feelings of *reactive anxiety* can be precipitated by exogenous stressors, eg, unpleasant social or interpersonal interactions, bereavement, stage fright,

chronic illness, business losses, or marital conflict. The mild to moderate undesirable feelings associated with reactive anxiety are considered by many physicians to represent a normal reaction to distress that does not necessarily require therapeutic intervention. An individual with *trait anxiety* displays an anxiety response to stress more frequently and/or greater than normally expected.

Pathologic anxiety is an extension of normal or reactive anxiety in response to known exogenous stressors to such an excessive degree that moderate to severe unpleasant feelings result. When the anxiety generated is out of proportion to an identifiable object or focus of concern, and results in moderate to severe depression as well, the illness is referred to as a *phobic disorder*. The cause of pathologic anxiety also can be entirely intrapsychic (no identifiable exogenous stressor, ie, free floating). Intrapsychic anxiety is characterized either by recurrent frequent panic attacks (*panic disorder*), or by a more persistent anxiety lasting at least one month (*generalized anxiety disorder*); in the latter, symptomatology is more pervasive and involves autonomic hyperactivity, motor tension, apprehension, and excessive vigilance.

Both phobic and panic disorders are diagnosed more frequently in women: data presently are inadequate to establish a ratio of incidence by sex for generalized anxiety disorder.¹¹

Treatment:

When anxiety occurs as a symptom of a major depressive illness, it is often relieved by an antidepressant alone. Similarly, anxiety occurring as a symptom of a psychosis, eg, schizophrenia, is commonly relieved by an antipsychotic drug. Although anxiety drugs are occasionally needed as adjunctive therapy for depression or schizophrenia, they are more effective and most useful in patients with uncomplicated anxiety.

Anxiety drugs are indicated when anxiety causes the patient genuine suffering and interferes with general functioning, job performance, or ability to relate to people. However, since they are subject to abuse and their misuse may hinder the development of personal coping strategies or the effective mobilization of social support systems in the family or community, as well as obscure the source of the anxiety, restraint may be necessary in pre-

scribing antianxiety agents.¹² On the other hand, some authorities¹³⁻¹⁵ have concluded that the prescription of antianxiety drugs specifically benzodiazepines, is actually conservative in spite of their wide spread use. This conclusion is based on the suppositions:

- 1) that the drug treatment of anxiety may actually be underutilized with respect to its known incidence,
- 2) that the benzodiazepines may represent more than non-specific therapy, ie, selected individuals with trait or pathologic anxiety may have altered receptors or may be deficient in a neurohumor that normally suppresses anxiety, and
- 3) that the benefits of the benzodiazepines considerably outweigh their risks, ie, tolerance, dependence, and complications resulting from overdose.

Depression

Definition:

Depression is one of the most common and clinically heterogenous psychiatric disorders in the United States and is prevalent in both urban and rural communities.¹⁶ Unfortunately, the term depression is used to designate a normal variant of mood, a character trait, part of a syndrome of a number of psychiatric disorders, or one of a group of distinct psychiatric illnesses. Thus, it is not always clear from case reports which description of depression is applicable. The term lacks clarity because criteria for its differential diagnosis have been inadequate to define precise entities that are consistently understood and communicated among health professionals.¹

Accurate diagnosis is essential for the optimal use of antidepressant drugs. Recently, new diagnostic criteria were proposed (*DSM III*)^{11, 17-19} to establish uniform procedures for the collection of data and the description of clinical findings in order to define relatively homogenous groups of patients more precisely.

The current classification of depression continues to emphasize the perception that at least two distinct types of depressive illness exist. The major affective disorders include two subsets, bipolar disorder and major depression. (Manic-depressive illness and endogenous depression are now less-preferred terms for bipolar disorders and major depression, respectively, but these older terms are common in the

literature.) Other specific affective disorders are cyclothymic disorder and dysthymic disorder; this latter encompasses the cluster of signs and symptoms formerly titled depressive neuroses. Because the signs and symptoms of involuntional melancholia are no longer considered sufficiently precise, this disorder has been eliminated as a special subset of depression. Uncomplicated bereavement (reactive depression) is usually self-limited and almost never requires antidepressant drug therapy.

Studies in Europe and in the United States indicate that, in the adult population, approximately 18% to 23% of the females and 8% to 11% of the males have at some time had a major depressive episode. It is estimated that the depressive episode was sufficiently severe to require hospitalization in 6% of females and 3% of males. Cyclothymic and dysthymic affective disorders also are apparently more common in women. Bipolar disorders are apparently equally common in men and women.¹¹

Etiology and Treatment:

The genetic-hormonal (often termed biochemical or biomedical), psychogenic, and sociologic theories of depression have been discussed in relation to the apparent susceptibility cited for women.¹

Patients with major depression (endogenous depression) have served as the principal medical models to study the genetic-hormonal theory of depression. Family history plays a much stronger role in the pathogenesis of this type of depression, and responsiveness to antidepressant drugs is much more satisfactory than for patients with a dysthymic affective disorder (depressive neuroses). Depression is postulated to result from a deficiency or imbalance of selected neurohumors and biochemical studies lend support to this hypothesis. Subsets of major depression are actually classified on the basis of signs and symptoms correlated with a likely defect in either norepinephrine or serotonin metabolism; an antidepressant drug is often then selected in accordance with the subset of major depression present. Women are considered to be especially susceptible; however, no known biological difference between men and women has been shown to be responsible for this vulnerability. Concern exists among authorities that too great a reliance on the genetic-humoral origins of depression results in impersonal and narrow appraisals of patients. Too much reliance on drug treatment,

inadequate psychotherapy and a neglect of environmental factors are the sequelae.

Psychogenic origins of depression are principally based on the classical psychoanalytical theory of early emotional experiences. Currently, the National Institute of Mental Health is conducting a three-year multi-institutional clinical trial comparing the effectiveness of antidepressant drugs to two types of psychotherapy that have been developed to treat depression.²⁰ Cognitive theorists link mood to thinking processes and describe the negative mental set of depressed persons who perceive their experiences in distorted and unusual ways; therefore, cognitive behavioral therapy relies on the perceived need to change patients' thinking patterns. Behavioral theorists consider depression to result from inadequate development of interpersonal relationships, and the individual learns that passivity, helplessness, and unresponsiveness are effective means of coping with interpersonal and environmental difficulties; therefore, interpersonal psychotherapy relies on the perceived need to improve patients' social relationships with others.²¹

Studies on the contribution of daily social stressors in the origins of depression have increased considerably during the last decade.^{1, 5, 7, 8, 22-24} Role conflicts or role overload (eg, wife, mother, worker) may be causative factors for the anxious and depressive symptomatology noted more prevalently in women than in men. An alternative view suggests that men are equally affected by differing social stressors, but they utilize mechanisms other than the health care delivery systems to solve their problems, for example, alcoholism. Additional environmental stressors determined to increase the risk for depressive symptomatology among women include being single, separated, or divorced; possessing low self-esteem because of a perceived or actual societal concept of lack of meaningful but expected consuming role of raising children compared to men; and the pressures associated with a low socioeconomic status.

Antianxiety and/or antidepressant drug therapy, or even psychotherapy, may not be especially useful when social stressors are the primary factors in the pathogenesis of the mental disorder other than for temporary use until other coping strategies are implemented. Although physicians are seldom able to alter

social stressors for individual patients in a therapeutic sense, they are in a position to detect the potential need for social support intervention (eg, avoidance of social isolation, creation of family network support at an early stage). On the other hand, concern exists that some house officers fail to recognize psychiatric disturbances and are unaware of the significance of stressful life events in their patients.²⁴ Systematized changes in medical curricula or other innovative techniques of postgraduate education may be necessary to correct this problem.²⁵

Conclusions

Women develop anxious and depressive symptomatology (psychic distress) at least twice as often as men. They also receive and use antianxiety and antidepressant drugs for this symptomatology twice as often as men. Various reasons for this difference have been cited:

- Some evidence exists to support the view that such prescription practices are at least appropriate, and may even represent underutilization, in view of the high incidence of psychic distress in women that remains untreated.
- Although the greater incidence of diagnosis and treatment of psychic distress in women could arise from a prejudicial bias by the principally male population of physicians, scientifically controlled evidence is scant to support this concept. Very recent studies,^{26, 27} at least help to identify hypotheses that can be tested to clarify this issue.
- The lower incidence of psychic distress in men could be misleading, because men may seek relief from such symptomatology more often than women through the use of alcohol instead of the health care systems. In any event, the possible documentation of a higher incidence in men does not lessen the relevance of the already high incidence documented in women.
- Some evidence exists that the difference in the incidence in women may be related to inaccurate diagnoses, inappropriate communication of diagnoses by health professionals, or too much reliance on drug therapy rather than psychotherapy or the development of social support systems.

- A considerable body of evidence supports the view that possible biological, but more probably psycho-social, factors are responsible for this difference in women.

Additional studies are needed to determine the relevance of each of the causative factors that have been advanced to account for the fact that women are diagnosed as being anxious or depressed and treated with tranquilizers and antidepressants at least twice as often as men.

Recommendations

1. Anxiety and depression are common disorders in the United States; however, many subsets exist for both disorders that range from variants of normality to severe illness. The type and intensity of either anxiety or depression may or may not be an indication for drug use. Unfortunately, criteria for the differential diagnosis of anxiety and depression are not always adequate to define precise entities that are consistently understood and communicated among health professionals. The Council on Scientific Affairs supports and recommends further studies (eg, the American Psychiatric Association—*Diagnostic and Statistical Manual III*) to clarify and identify more accurate diagnostic criteria for anxiety and depression so that more uniform prescribing of non-drug and drug therapies may follow.
2. The Council on Scientific Affairs recommends that the AMA encourage research in the development of new psychosocial models of depression in addition to the current biomedical models in order to determine more precisely the role and degree that all possible causative factors contribute to depression in individuals, especially women.
3. Data are needed on the natural history, clinical course, and morbidity of individuals with untreated anxiety and depression in order to assess the effectiveness, and therefore the role, that psychotherapy, im-

plementation of social support systems, and drug therapy fulfill in specific subsets of these disorders. As guidelines on the use of non-drug and drug therapies are developed from such studies, the Council on Scientific Affairs recommends that the American Medical Association, through its scientific publications and activities, make such information available to the practicing physician to assure proper drug prescribing practices for anxiety and depression.

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News From The Oklahoma State Department of Health

Newborn Hearing Screening

Legislation was enacted this year to provide for early identification of hearing loss in infants. Senate Bill 574 specifically requires the State Board of Health to "develop procedures and guidelines for the administration of screening procedures for the detection of hearing impairments in infants."

To develop guidelines for the board's approval, the health department is setting up a task force composed of individuals from professional organizations interested in hearing problems and consumers who have dealt with such issues on a personal basis. The task force will review major approaches to early identification, including the use of high-risk registers,

behavioral screening methods, etc., and will make recommendations on the most cost-efficient and expeditious method of identifying children with hearing problems.

Hearing problems impact children significantly, diminishing their ability to learn and develop language and social skills. SB 574 focuses on early identification and prevention, which would maximize the opportunities hearing impaired children have for normal development.

As required by the Legislature, the Oklahoma State Department of Health will publish annual results of the screening program to facilitate the care and education of children identified as having hearing losses. □

COMMUNICABLE DISEASES IN OKLAHOMA FOR AUGUST, 1982

DISEASE	AUGUST 1982	AUGUST 1981	JULY 1982	TOTAL TO DATE	
				1982	1981
Amebiasis	1	4	—	10	19
Aseptic Meningitis	13	28	29	79	76
Brucellosis	—	—	—	4	3
Encephalitis, Infectious	3	2	3	19	18
Gonorrhea (Use Form ODH-228)	1303	1548	1527	10560	10402
Hepatitis A	53	31	74	460	210
Hepatitis B	34	21	39	223	148
Hepatitis Unspecified	18	9	32	173	92
Malaria	1	2	3	7	7
Measles (Rubeola)	21	—	—	21	5
Meningococcal Infections	1	4	7	24	35
Pertussis	2	1	—	5	2
Rabies (Animal)	14	16	17	146	160
Rocky Mountain Spotted Fever	9	10	25	65	93
Rubella	—	—	—	3	—
Salmonellosis	56	63	58	242	260
Shigellosis	49	99	49	234	237
Syphilis (Use Form ODH-228)	11	13	26	129	117
Tetanus	—	—	—	1	1
Tuberculosis	19	46	25	253	241
Tularemia	3	2	9	23	17
Typhoid Fever	—	—	—	2	4



Former US Senator Henry Bellmon (left) displays the 1982 Outstanding Layman Award. Dr. Ed Calhoun (right) presented the award to Bellmon.

OSMA Trustees Bestow Awards On Bellmon, McGee, and Lytle

Former US Senator Henry Bellmon, Dean A. McGee, and the late Roy Cook Lytle were honored by the Oklahoma State Medical Association at the OSMA Board of Trustees meeting held September 12.

The Outstanding Layman Award for 1982 went to Bellmon for his service to the people of Oklahoma and his strong support of the medical community. McGee received the 1981 Outstanding Layman Award voted him at last year's annual meeting for his community service, philanthropy, and dedication to improving Oklahoma's medical services.

A certificate of appreciation was presented to Mr. Lytle's widow, Joanne, in recognition of Mr. Lytle's distinguished service to the association as general counsel for more than 30 years.

Dr. C. Alton Brown presented a report to the board on the status of the Physicians Liability Insurance Company (PLICO). Dr. Brown discussed the need for a PLICO rate increase (approved by the PLICO Board of Directors) but pointed out that the increase will result in a premium with a slightly lower net

cost than that experienced last year through the combined assessment and premium. This means that while the premium will go up, the cost to physicians

Dr. James Pitts (left) presents the 1981 Outstanding Layman Award to Dean A. McGee.



will go down and the cost of professional liability insurance without the assessment will probably be slightly lower in 1983.

Dr Brown commended the loss prevention program sponsored by OSMA and PLICO that was presented in July and August at six locations across the state. He said he expected the program to have a favorable impact on the long-range loss experience of PLICO.

With regard to the PLICO Health program, Dr Brown said that it has progressed at an astonishing pace and that rates for the health and accident insurance should remain consistently lower than those of commercial carriers. He noted that PLICO's overhead is only a fraction of that of all commercial insurers, including Blue Cross.

In other business, the Board of Trustees approved OSMA Life Membership for the following physicians: Kieffer Davis, MD, Bartlesville; Eugene Henry, MD, Muskogee; and Byron C. Hollenback, MD, Altus. The trustees also received the committee and special reports on the following subjects:

- Perinatal Task Force
- Foreign Medical Graduates
- Business/Medicine Coalition
- Oklahoma Foundation for Peer Review
- OSMA Endowment Fund

The next meeting of the Board of Trustees is set for November 21. □

Physicians Reminded of Need To Meet Packaging Standards

The Southwestern Regional Office of the US Consumer Product Safety Commission has issued a statement reminding physicians who dispense drugs of their responsibilities under the child protection packaging standards of the Poison Prevention Packaging Act (PPPA).

The statement was contained in a letter from Jeanne D. White, commission regional director, to the Oklahoma State Medical Association. The commission's position on applicability of the standards is as follows:

Prescription drugs dispensed by physicians are subject to the child protection packaging

standards of the Poison Prevention Packaging Act in the same manner as prescription drugs dispensed by pharmacists. Therefore, a physician is responsible under the law for dispensing prescription drugs in child-resistant packaging.

The law does provide that non-child-resistant conventional packaging may be provided the consumer either at his request or at the direction of the prescribing physician. This does not, however, exempt drugs dispensed by the physicians from the provisions of the law but rather allows the physician to consciously conclude within the spirit and intent of the noncomplying package exemption provisions that a particular patient, ie, the elderly or handicapped, would be unable to gain access to the drug if dispensed in child-resistant packaging. The legislative history of this provision of the PPPA is clear in expressing the intent of Congress that *noncomplying packaging is to be the exception rather than the rule.*

White pointed out that the child protection packaging standards for aspirin and other substances have reduced ingestions by children by as much as 60%, while prescription drug ingestions have been reduced by only about 22%. She said part of the reason for the relatively small reduction in ingestions of prescription drugs may be confusion over the physician's responsibilities when dispensing drugs.

White also said that physicians can play a vital role in increasing consumer acceptance of child-resistant packaging by demonstrating its proper use and explaining its importance in reducing childhood poisonings and deaths. □

Therapy Regimen Extended At Rehabilitation Institute

The Don H. O'Donoghue Rehabilitation Institute, an affiliate of the State of Oklahoma Teaching Hospitals, is now providing physical and occupational therapy seven days a week. The new policy extending therapy sessions through the weekend went into effect October 1.

William G. Thurman, MD, chief of staff of the institute, said the reasons for extending the sessions was to enable patients to return to the community as quickly as possible.

The O'Donoghue Rehabilitation Institute opened a year and a half ago and is now running at 70% to 80% occupancy. Dr Thurman expects to reach 100% occupancy by December. □

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Doctor Warns Against Using Urine Injections As Therapy

Injecting patients with small amounts of their own urine as a therapy for allergic reactions is ineffective and "potentially dangerous," according to allergy investigator Michael H. Grieco, MD.

Dr Grieco reported his findings on the practice in the June 11, 1982, issue of the *Journal of the American Medical Association*. His conclusion was part of a review paper on five controversial allergy practices.

The disputed method, called *autogenous urine immunization*, has been in use for 35 years. Until recently, it had been advertised to the general public.

First proposed by Dr J. Plesch in 1947, the method calls for injecting patients with up to a teaspoonful of their own sterilized urine. Dr Grieco said the method is risky because urine

may contain proteins present in the lining of a patient's kidney tubules. When injected into the muscle, as the Plesch method proposes, these proteins may stimulate the body's immunologic defense system to attack and injure this critically important kidney membrane.

The method also is dangerous because patients are advised to swallow, inhale, or otherwise expose themselves to the allergens that trouble them before seeing the doctor for the first urine injection. Such a practice may provoke allergic attacks.

Since the method "has no rational or immunologic logic," Dr Grieco supports the recommendation of the American Academy of Allergy and Immunology that it not be used in medical practice.

The other controversial practices reviewed by Dr Grieco and found to be either ineffective or inadequately documented include skin titration (Rinkel method); provocative testing and neutralization under or inside the skin; sublingual provocative test; and cytotoxicity testing (Bryan's test). □

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Deaths

WILLIAM E. EASTLAND, MD

1898 - 1982

William E. Eastland, MD, retired Oklahoma City therapeutic radiologist and dermatologist, died October 3, 1982. A native of Waco, Texas, Dr Eastland came to Oklahoma City in 1900. He was graduated from the University of Oklahoma College of Medicine in 1923, where he later became Professor Emeritus of Therapeutic Radiology. His practice was established in Oklahoma City where he continued active in medical circles until his retirement. Dr Eastland was an Honorary Fellow of the American College of Radiology, a member of the American Academy of Medicine, Radiological Society of North America and a Life Member of the OSMA. In 1944 Dr Eastland served as President of the Oklahoma County Medical Society.

TILLMAN A. RAGAN, MD

1903-1982

A retired, Norman general practitioner, Tillman A. Ragan, MD, died September 5, 1982. Dr Ragan was born in Vienna, Missouri in 1903 and was graduated from the University of

Oklahoma College of Medicine in 1932. He practiced in Fairfax for several years before coming to Norman. During World War II, he had served with the US Army Medical Corps. In 1977 the OSMA presented Dr Ragan with a Life Membership in recognition of his service to humanity and the medical profession. □

In Memoriam

1981

<i>F. R. Hassler, MD</i>	<i>December 12</i>
<i>James R. Barnes, MD</i>	<i>December 13</i>
<i>E. Rankin Denny, MD</i>	<i>December 16</i>
<i>John P. Grimes, MD</i>	<i>December 24</i>

1982

<i>Frances P. Newlin, MD</i>	<i>February 16</i>
<i>James T. Maddox, MD</i>	<i>February 21</i>
<i>Joseph F. Messenbaugh, MD</i>	<i>March 12</i>
<i>James Russell Kreger, MD</i>	<i>April 3</i>
<i>Boyd Vance Lucas, MD</i>	<i>April 9</i>
<i>Carlton E. Smith, MD</i>	<i>April 23</i>
<i>Ella H. Murray, MD</i>	<i>May 3</i>
<i>Loyd G. Williams, MD</i>	<i>May 15</i>
<i>A. A. Walker, MD</i>	<i>July</i>
<i>Thomas H. Fair, MD</i>	<i>August 15</i>
<i>Clyde E. Harris, MD</i>	<i>September 1</i>
<i>Tillman A. Ragan, MD</i>	<i>September 5</i>
<i>William A. Eastland, MD</i>	<i>October 3</i>

□

Rural Primary Care Group Calls for Conference Papers

The National Rural Primary Care Association has issued a call for papers for the Sixth Annual Conference on Rural Primary Care to be held Sunday to Tuesday, March 6-8, 1983, in Kansas City, Missouri.

Contributions from researchers, health professionals, and administrators are invited in the form of (1) original research and evaluation, (2) program evaluation and problem-oriented case studies, and (3) descriptive, analytic, or methodological papers.

Manuscripts will be examined and acknowledged upon receipt. Each submission will be reviewed by the Research Program Committee. Selection of manuscripts for presentation will be based on timeliness of topic, originality, soundness of method, significance of findings,

appropriateness of conclusions for policy development, and quality of presentation.

No paper presented may have been published previously. Papers must be received no later than Tuesday, November 30, 1982.

Manuscripts should be approximately 2,000 to 4,000 words in length, exclusive of tabular material. Manuscripts must be typewritten on one side only of 8½" x 11" paper, double-spaced with liberal margins. Pages should be numbered consecutively. References should appear in order of citation on a separate page at the end of the text. The style of references is that of Index Medicus, using standard abbreviations of journal names.

Five copies of the manuscript and illustrative material should be sent to Ben F. Banahan III, PhD, Department of Community Medicine, School of Primary Medical Care, University of Alabama in Huntsville, 109 Governors Drive, SW, Huntsville, Alabama 35801. □

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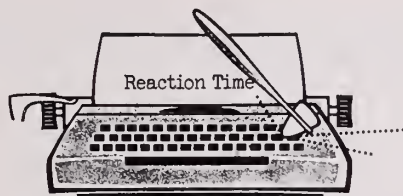
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June 21, 1982

Dear Dr Johnson:

As a physician and parent, I am in complete support of your position expressed in the March, 1982, *OSMA Journal*, entitled, "Right Weapon-Wrong Target". It saddens me to read comments to the contrary, especially when they have threatening overtones.

We are all victims of the tremendous costs in terms of money, lost man hours and misery, sustained as a result of alcoholism. Over the years, I have been at the scenes of numerous automobile accidents involving drinking and death. The horror and shock of viewing mangled bodies of all ages is something about which I have never and will never become accustomed. Moreover, I wonder how many of your readers have had similar experiences and what their feelings have been? My own mother and father were nearly killed this past Christmas by a drinking driver. I finally began to see why there is such a need for getting the alcoholic into treatment and that, if necessary, we as physicians, should use our political clout to do so. As a matter-of-fact, a great many in the lay community have been quite vocal about this very thing, witness the recent passage of legislation in our state mandating stiffer penalties for the intoxicated driver.

I think it's one thing to "cry" about the damage a cigarette smoker does to his or her own health and to pontificate with statistics in comparing cigarettes to alcohol; it's quite another to ignore and deny the obvious danger to us as physicians from the alcoholic, be he a patient, colleague, driver, or family member. Time is pressing and it is urgent for us in the medical community to recognize that alcoholism is a deadly disease and that many suffering from its scourge are in great personal pain and anguish. This does not even begin to reflect countless others who have had great personal misfortune as a consequence of the alcoholics' behavior.

I'm hoping the *Journal* will publish some educational articles on alcoholism and drug addic-

tion. It would be good to see more recognition of this disease to supplement the meager number of hours of instruction on alcoholism that most of us received in medical school. If just one physician, patient, or reader benefits, your efforts to have reached out will have been validated.

Thank you, again, for having the courage to express your convictions. In state and national medical publications, there is a need for more editors like yourself.

Sincerely yours,
BILL CROWELL, M.D.
Chickasha, Okla.

□

Betty DeLong of State AAMA Elected as National Trustee

Betty DeLong, CMA-A, of Bethany, has been elected a trustee of the American Association of Medical Assistants (AAMA). She took office September 24 at the AAMA Inaugural Banquet in Houston.

DeLong is a member of the Oklahoma County Chapter, Oklahoma State Society of AAMA, and has been active in the association at national, state, and county levels. She is employed as office manager for the Western Oaks Medical Center.

Elections were held during the AAMA's 26th annual convention. Several hundred medical assistant practitioners, educators, and students, as well as guests from other medical and allied health disciplines, attended the meeting. Topics on the educational program included the impact of legislative issues on allied health, the behavioral approach to patient communications, ethical concerns of medicine, and effective supervisory techniques.

The AAMA is a professional organization composed of receptionists, clinical assistants, secretaries, technicians, office managers, and other allied health specialists who work in physicians' offices and other medical facilities. Nationwide, there are 17,000 members of AAMA.

□

**1983 OSMA
ANNUAL MEETING
May 4-7, 1983**

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1982 SCHEDULE

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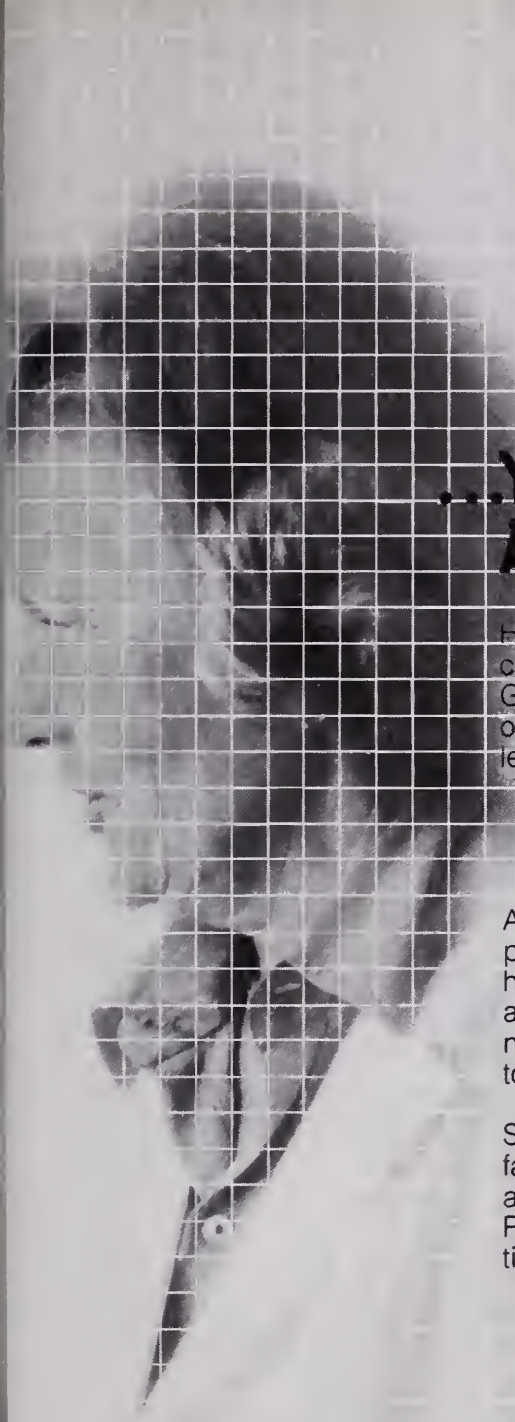
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The effectiveness of Valium (diazepam/Roche) in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma, may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms similar to those with barbiturates and alcohol have been observed with abrupt discontinuation, usually limited to extended use and excessive doses. Infrequently, milder withdrawal symptoms have been reported following abrupt discontinuation of benzodiazepines after continuous use, generally at higher therapeutic levels, for at least several months. After extended therapy, gradually taper dosage. Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation. The clearance of Valium and certain other benzodiazepines can be delayed in association with Tagamet (cimetidine) administration. The clinical significance of this is unclear.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. **Adults:** Anxiety disorders, symptoms of anxiety, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. **Geriatric or debilitated patients:** 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) **Children:** 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

How Supplied: For oral administration, Valium scored tablets—2 mg, white; 5 mg, yellow; 10 mg, blue—bottles of 100* and 500;* Prescription Paks of 50, available in trays of 10 * Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25,† and in boxes containing 10 strips of 10.‡

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RU-TUSS[®]

Tablets

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Phenylpropanolamine Hydrochloride	50 mg
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Ru-Tuss Tablets act continuously for 10 to 12 hours

Ru-Tuss Tablets are an oral antihistaminic, nasal decongestant and anti-secretory preparation

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CONTRAINDICATIONS Hypersensitivity to antihistamines or sympathomimetics. Ru-Tuss Tablets are contraindicated in children under 12 years of age and in patients with glaucoma, bronchial asthma and women who are pregnant. Concomitant use of MAO inhibitors is contraindicated.

WARNINGS Ru-Tuss Tablets may cause drowsiness. Patients should be warned of the possible additive effects caused by taking antihistamines with alcohol, hypnotics, sedatives or tranquilizers.

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OVERDOSAGE Since the action of sustained release products may continue for as long as 12 hours, treatment of overdoses directed at reversing the effects of the drug and supporting the patient should be maintained for at least that length of time. Saline cathartics are useful for hastening evacuation of unreleased medication. In children and infants, antihistamine overdosage may produce convulsions and death.

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DOSAGE AND ADMINISTRATION Adults and children over 12 years of age, one tablet morning and evening. Not recommended for children under 12 years of age. Tablets are to be swallowed whole.

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RU-TUSS[®]

Expectorant

DESCRIPTION

Each fluid ounce of Ru-Tuss Expectorant contains:

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Phenylephrine Hydrochloride	
Phenylpropanolamine Hydrochloride	
Pheniramine Maleate	
Pyriminamine Maleate	
Ammonium Chloride	
Alcohol	

Ru-Tuss Expectorant is an oral antitussive, antihistaminic, nasal decongestant and expectorant preparation.

INDICATIONS AND USAGE Ru-Tuss Expectorant is indicated for symptomatic relief of upper respiratory congestion associated with pharyngitis, tracheitis, bronchitis, and allergic rhinitis. Also, for the temporary relief of symptoms associated with hay fever, allergies, nasal congestion and cough due to the common cold.

CONTRAINDICATIONS Hypersensitivity to antihistamines. Concomitant use of antihypertensive or antidepressant drug containing a monoamine oxidase inhibitor is contraindicated.

Ru-Tuss Expectorant is contraindicated in patients with glaucoma, bronchial asthma and in women who are pregnant.

WARNINGS Ru-Tuss Expectorant contains codeine phosphate, therefore, the patient should be warned of the potential that this drug may be habit forming. Ru-Tuss Expectorant may cause drowsiness. Patients should be warned of the possible additive effect caused by taking antihistamines with alcohol, hypnotics, sedatives and tranquilizers.

PRECAUTIONS Patients taking Ru-Tuss Expectorant should avoid driving a motor vehicle or operating dangerous machinery (See Warnings). Caution should be taken with patients having hypertension, diabetes, hyperthyroidism and cardiovascular disease. Caution should also be used in patients with pulmonary, hepatic or renal insufficiency.

ADVERSE REACTIONS Ru-Tuss Expectorant may cause drowsiness, lassitude, giddiness, dryness of mucous membranes, tightness of the chest, thickening of bronchial secretions, urinary frequency and dysuria, palpitation, tachycardia, hypotension, hypertension, nervousness, dizziness, tinnitus, headache, incoordination, visual disturbances, mydriasis, xerostomia, blurred vision, anorexia, nausea, vomiting, diarrhea, constipation, epigastric distress, hyperirritability, nervousness, and insomnia. Overdoses may cause restlessness, excitation, delirium, tremors, euphoria, metabolic acidosis, stupor, tachycardia and convulsions.

DOSAGE AND ADMINISTRATION Adults: 1 or 2 teaspoonfuls, orally, every 4 hours, not to exceed 10 teaspoonfuls in any 24-hour period.

Children 6 to 12 years of age: $\frac{1}{2}$ the adult dose, not to exceed 6 teaspoonfuls in any 24-hour period. Children 2 to 6 years of age: $\frac{1}{4}$ teaspoonful every 4 hours, not to exceed 3 teaspoonfuls in any 24-hour period. Children under 2 years of age: Use as directed by a physician.

HOW SUPPLIED: (16 fl oz.)

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Before prescribing, please consult complete product information, a summary of which follows:

Each Berocea[®] Plus tablet contains 5000 IU vitamin A (as vitamin A acetate), 30 IU vitamin E (as *dl*-alpha tocopheryl acetate), 500 mg vitamin C (ascorbic acid), 20 mg vitamin B₁ (as thiamine mononitrate), 20 mg vitamin B₂ (riboflavin), 100 mg niacin (as niacinamide), 25 mg vitamin B₆ (as pyridoxine HCl), 0.15 mg biotin, 25 mg pantothenic acid (as calcium pantothenate), 0.8 mg folic acid, 50 mcg vitamin B₁₂ (cyanocobalamin), 27 mg iron (as ferrous fumarate), 0.1 mg chromium (as chromium nitrate), 50 mg magnesium (as magnesium oxide), 5 mg manganese (as manganese dioxide), 3 mg copper (as cupric oxide), 22.5 mg zinc (as zinc oxide).

Indications: Prophylactic or therapeutic nutritional supplementation in physiologically stressful conditions, including conditions causing depletion, or reduced absorption or bioavailability of essential vitamins and minerals; certain conditions resulting from severe B-vitamin or ascorbic acid deficiency; or conditions resulting in increased needs for essential vitamins and minerals.

Contraindications: Hypersensitivity to any component.

Warnings: Not for pernicious anemia or other megaloblastic anemias where vitamin B₁₂ is deficient. Neurologic involvement may develop or progress, despite temporary remission of anemia, in patients with vitamin B₁₂ deficiency who receive supplemental folic acid and who are inade-

quately treated with B₁₂.

Precautions: *General:* Certain conditions may require additional nutritional supplementation. During pregnancy, supplementation with vitamin D and calcium may be required. Not intended for treatment of severe specific deficiencies. *Information for the Patient:* Toxic reactions have been reported with injudicious use of certain vitamins and minerals. Urge patients to follow specific dosage instructions. Keep out of reach of children. *Drug and Treatment Interactions:* As little as 5 mg pyridoxine daily can decrease the efficacy of levodopa in the treatment of parkinsonism. Not recommended for patients undergoing such therapy.

Adverse Reactions: Adverse reactions have been reported with specific vitamins and

5,000,000 hospital patients with infections.⁴ Many are anorectic and may have a markedly reduced food intake. Supplements are often provided as a prudent measure because the vitamin status of critically ill patients cannot be readily determined.³

The incalculable millions on calorie-reduced diets. Patients ingesting 1000 or fewer calories per day could be at high risk because this intake may not supply most nutrients in adequate amounts without supplementation.⁵

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Berocca Plus Tablets provide: therapeutic levels of ascorbic acid and B-complex vitamins; supplemental levels of biotin, vitamins A and E, and five important minerals (iron, chromium, manganese, copper and zinc); plus magnesium. Berocca Plus is not intended for the treatment of specific vitamin and/or mineral deficiencies.

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References: 1. Shaw S, Lieber CS: Nutrition and alcoholism, chap. 40, in *Modern Nutrition in Health and Disease*, edited by Goodhart RS, Shils ME. Philadelphia, Lea & Febiger, 1980, pp. 1220, 1237. 2. Watkin DM: Nutrition for the aging and the aged, chap. 28, in *Modern Nutrition in Health and Disease*, op. cit., p. 781. 3. Shils ME, Randall HT: Diet and nutrition in the care of the surgical patient, chap. 36, in *Modern Nutrition in Health and Disease*, op. cit., pp. 1084, 1089, 1114. 4. Dixon RE: *Ann Intern Med* 89 (Part 2): 749-753, Nov 1978. 5. Committee on Dietary Allowances, National Research Council: Recommended Dietary Allowances, ed 9. Washington, National Academy of Sciences, 1980, p. 13.

minerals, but generally at levels substantially higher than those in Berocca Plus. However, allergic and idiosyncratic reactions are possible at lower levels. Iron, even at the usual recommended levels, has been associated with gastrointestinal intolerance in some patients.

Dosage and Administration: Usual adult dosage: one tablet daily. Not recommended for children. Available on prescription only.

How Supplied: Golden yellow, capsule-shaped tablets—bottles of 100.

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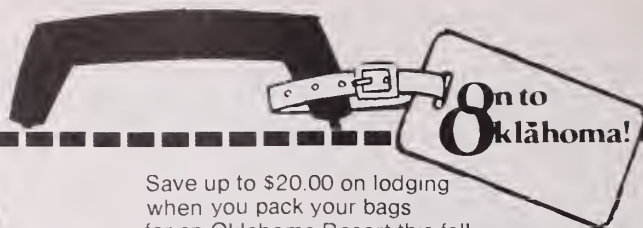


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Aside from enabling patients to fall asleep more quickly and sleep longer, Dalmane seldom causes morning hangover. Most Dalmane patients feel alert and refreshed when they awaken. In 53 paired-night clinical studies comparing Dalmane and placebo in 2010 insomniac patients with a variety of secondary diagnoses, most Dalmane patients awakened more alert and refreshed, and less groggy and drowsy, than on nights when they had taken only placebo.¹ In a double-blind crossover study of

42 patients in private practice, approximately three times as many patients reported feeling refreshed and alert upon awakening after a night on Dalmane (flurazepam/Roche) compared to placebo nights.² This difference was highly significant ($p < 0.001$). And a retrospective study of 254 hospitalized patients who received Dalmane revealed only a 3.1% incidence of side effects.³

While residual effects from Dalmane therapy are infrequent, patients should be cautioned about drinking alcohol, driving or operating hazardous machinery after ingesting the drug.

Efficacy and safety in a broad range of patient types.

Over 2000 clinical trials involving more than 10,000 patients have shown that Dalmane patients fall asleep sooner, sleep longer and experience fewer nocturnal awakenings.⁴ The safety and efficacy of Dalmane have been demonstrated in medical and surgical hospitalized patients, in patients seen in office practice and in elderly patients.⁵⁻⁸ Since the risk of oversedation, dizziness, confu-



sion and/or ataxia increases with larger doses in the elderly, it is recommended that the dosage be limited to 15 mg.

Moreover, the efficacy and safety of Dalmane for the treatment of insomnia have been demonstrated in thousands of patients with a variety of primary medical conditions, including cardiovascular, neuropsychiatric, endocrine-metabolic, gastrointestinal, genitourinary, respiratory and musculoskeletal disorders.¹ Dalmane (flurazepam HCl/Roche) is contraindicated in pregnancy and in patients hypersensitive to the drug.

Avoids rebound insomnia upon discontinuation.

Rebound insomnia—a worsening of sleep beyond pretherapy levels after drug discontinuation—has been reported as a potential clinical problem with some hypnotics.^{9,10} However, this problem has not been reported with Dalmane. In eight out of eight sleep laboratory studies, there were no reports of rebound insomnia.¹¹ When you prescribe Dalmane, you can be confident of efficacy that enhances therapeutic progress. Your insomniac patients can be assured of a restful night, night after night—a good start for a good morning.

References: 1. Data on file, Hoffmann-La Roche Inc., Nutley, NJ. 2. Zimmerman AM: *Curr Ther Res* 13:18-22, Jan 1971. 3. Greenblatt DJ, Allen MD, Shader RI: *Clin Pharmacol Ther* 21:355-361, Mar 1977. 4. Data on file, Hoffmann-La Roche Inc., Nutley, NJ. 5. Meyer JA, Kurland KZ: *Milit Med* 138:471-474, Aug 1973. 6. Feller HL, Gibbons B: *Med Times* 101(8):130-135, Aug 1973. 7. Jacobson A et al: *Psychophysiology* 7:345, Sep 1970. 8. Frost JD Jr, DeLucchi MR: *J Am Geriatr Soc* 27:541-546, Dec 1979. 9. Kales A, Scharf MB, Kales JD: *Science* 201:1039-1041, Sep 1978. 10. Kales A et al: *JAMA* 241:1692-1695, Apr 1979. 11. Monti JM: *Methods Find Exp Clin Pharmacol* 3(5):303-326, 1981.

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Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; in acute or chronic medical situations requiring restful sleep. Objective sleep laboratory data have shown effectiveness for at least 28 consecutive nights of administration. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended. Repeated therapy should only be undertaken with appropriate patient evaluation.

Contraindications: Known hypersensitivity to flurazepam HCl; pregnancy. Benzodiazepines may cause fetal damage when administered during pregnancy. Several studies suggest an increased risk of congenital malformations associated with benzodiazepine use during the first trimester. Warn patients of the potential risks to the fetus should the possibility of becoming pregnant exist while receiving flurazepam. Instruct patient to discontinue drug prior to becoming pregnant. Consider the possibility of pregnancy prior to instituting therapy.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. An additive effect may occur if alcohol is consumed the day following use for nighttime sedation. This potential may exist for several days following discontinuation. Caution against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Potential impairment of performance of such activities may occur the day following ingestion. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, abrupt discontinuation should be avoided with gradual tapering of dosage for those patients on medication for a prolonged period of time. Use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase; and paradoxical reactions, e.g., excitement, stimulation and hyperactivity.

Dosage: Individualize for maximum beneficial effect.

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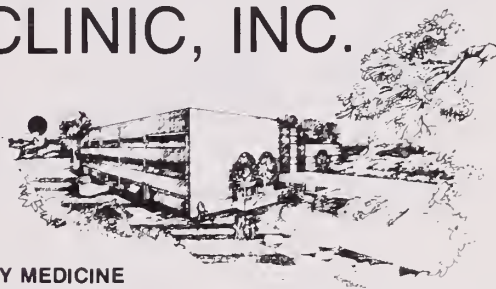
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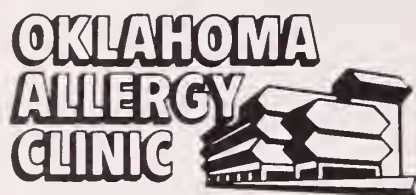
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References:

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CONTRAINDICATIONS: Patients hypersensitive to ibuprofen, or with the syndrome of nasal polyps, angio-edema and bronchospastic reactivity to aspirin or other nonsteroidal anti-inflammatory drugs (see WARNINGS).

WARNINGS: Anaphylactoid reactions have occurred in patients hypersensitive to aspirin (see CONTRAINDICATIONS). Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Peptic ulceration, perforation, or gastrointestinal bleeding can end fatally, however, an association has not been established. Rufen should be given under close supervision to patients with a history of upper gastrointestinal tract disease, and only after consulting the ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be attempted. If Rufen must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding.

PRECAUTIONS: Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If developed, discontinue Rufen and administer an ophthalmologic examination.

Fluid retention and edema have been associated with Rufen; caution should be used in patients with a history of cardiac decompensation.

Rufen can inhibit platelet aggregation and prolong bleeding time. Use with caution in patients with intrinsic coagulation defects and those taking anticoagulants.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain or edema.

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy, this therapy should be tapered slowly when adding Rufen.

DRUG INTERACTION: Coumarin-type anticoagulants. The physician should be cautious when administering Rufen to patients on anticoagulants.

Aspirin. Concomitant use may decrease Rufen blood levels.

PREGNANCY AND NURSING MOTHERS: Rufen should not be taken during pregnancy nor by nursing mothers.

ADVERSE REACTIONS: Incidence greater than 1%. **Gastrointestinal:** The most frequent adverse reaction is gastrointestinal (4 to 16%). Includes nausea*, epigastric pain*, heartburn*, diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of GI tract (bloating and flatulence). **Central Nervous System:** dizziness*, headache, nervousness. **Dermatologic:** rash* (including maculopapular type), pruritus. **Special Senses:** tinnitus. **Metabolic:** decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS). *Incidence 3% to 9%.

Incidence less than 1 in 100. Gastrointestinal: gastric or duodenal ulcer with bleeding and/or perforation, hemorrhage, melena. **Central Nervous System:** depression, insomnia, confusion, emotional lability, somnolence, aseptic meningitis with fever and coma. **Dermatologic:** vesiculobullous eruptions, urticaria, erythema multiforme, Stevens-Johnson syndrome and alopecia. **Special Senses:** hearing loss, amblyopia (blurred and/or diminished vision, scotomata and/or changes in color vision) [see PRECAUTIONS]. **Hematologic:** neutropenia, agranulocytosis, aplastic anemia, hemolytic anemia (sometimes Coombs' positive), thrombocytopenia with or without purpura eosinophilia, decreases in hemoglobin and hematocrit. **Cardiovascular:** congestive heart failure in patients with marginal cardiac function, elevated blood pressure. **Allergic:** syndrome of abdominal pain, fever, chills, nausea and vomiting, anaphylaxis, bronchospasms (see CONTRAINDICATIONS). **Renal:** acute renal failure in patients with preexisting significantly impaired renal function, decreased creatinine clearance, polyuria, azotemia, cystitis, hematuria. **Miscellaneous:** dry eyes and mouth, gingival ulcers, rhinitis.

Causal relationship unknown. Gastrointestinal: pancreatitis. **Central Nervous System:** paresthesias, hallucinations, dream abnormalities, pseudotumor cerebri. **Dermatologic:** toxic epidermal necrolysis, photo-allergic skin reactions. **Special Senses:** conjunctivitis, diplopia, optic neuritis. **Hematologic:** bleeding episodes. **Allergic:** serum sickness, lupus erythematosus syndrome, Henoch-Schönlein vasculitis. **Endocrine:** gynecomastia, hypoglycemia. **Cardiovascular:** arrhythmias (sinus tachycardia, bradycardia, and palpitations). **Renal:** renal papillary necrosis.

OVERDOSAGE: Acute overdosage, the stomach should be emptied. Rufen is acidic and excreted in the urine, alkaline diuresis may benefit.

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Footnotes, bibliographies, and legends for illustrations should be submitted on separate sheets, double-spaced. Bibliographies should follow in order of: name and author, title or article, name of periodical with volume number, page and date of publication. These references should be numbered in the sequence in which they appear in the article.

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NEWS

Members of the Oklahoma State Medical Association, the constituent societies of the association, and all readers in general are invited to supply news items of general interest to the profession.

ADVERTISING

All advertising copy must be approved by the Editorial Board before acceptance for publication. General and miscellaneous advertising rates will be sent on request.

EDITING SERVICE

The Editorial Board reserves the prerogative to submit contributions to a Medical Editing Service when warranted. If such is felt necessary, the Editor will contact the author for approval, informing him that there will be a modest charge for this service.

REPRINTS

Authors will receive reprint order forms from the Transcript Press, P.O. Drawer 1058, Norman, Oklahoma 73070, prior to final publication of their articles. Other requests for reprints must be made to the Transcript Press within 30 days after publication.

BACK ISSUES

Microfilm copies of back issues of *The Journal* may now be purchased from University Microfilms International, 300 North Zeeb Road, Ann Arbor, Michigan 48106.

Traditionally, spring is considered the growing season, but, if you think about it, nature as well as people, are really growing and evolving all the time. Nature seems to dictate that what is alive either progresses or decays, moves forward or backward. We too, refuse to be static, in a sense we are forced to be dynamic. But, if we are to grow, like nature, we must plant seeds so that germination takes place and fruition follows. How, you ask, does this apply to auxiliary? Let me try to explain my theory.

In these past few years as I have diligently applied my efforts towards auxiliary, I have observed growing take place as many seeds have been planted. Because of the efforts of many, changes are taking place on both a state and national level. Through its Long Range Planning Committee, our national leaders and organization have taken a long look at themselves and their problems. They have introduced fresh insight into old committees, eliminating some and replacing others. Indeed, national is to be complimented on the splendid growth that has taken place in its 60 years of existence. The propelling force of its current leadership is energetic, contagious and brings a new enthusiasm to those of us who lead on a state level.

Examples of ingenuity and farsightedness are the new Professional Skills Development Program to document the resumes from the many training programs that auxiliary members take at national and local levels. This will give members tangible evidence of their skills which they might want to someday offer to the business world. Another singular approach is the People Bank, a network of auxiliary lead-

ers and members who will share their expertise and talents in particular areas with other auxiliaries across the country. The People Bank will complement the highly successful AMA Auxiliary Project Bank.

As state president, I have the opportunity to travel and visit with auxiliaries across our great state. Here too, I see involvement and change. It just takes the interest and enthusiasm of one county's president lighting the darkness with her candle; momentum builds and projects begin to happen in a community. In the few visits we have been privileged to make thus far, we note differences and new spirit; it's exciting to be a part of it.

The above mentioned are a few examples of the innovative ideas that are helping "your" auxiliary to grow and meet the new needs of its members. As the song says, "the times they are a changin' " and if we're to survive we must change too.

A final note — The days are getting shorter, a new crispness knits the air, football games, falling leaves, gorgeous colors like burnished gold surround us, signaling the approach of the Thanksgiving season. For all the blessings you have heaped upon us as a nation, Oh God, we are truly thankful! HAPPY THANKSGIVING TO YOU AND YOURS!

Heap high the Board with
Plentiful cheer, and gather
To the feast, and toast the
Sturdy Pilgrim Band whose courage never
ceased.

— Alice W. Brotherton

Oral Roberts University has hired Dr David B. Hinshaw as new dean of its school of medicine. Dr Hinshaw served as chief of surgical services at the Jerry L. Pettis Memorial Veterans Hospital in Loma Linda, California. He fills the vacancy created last summer when Dr Sidney A. Garrett left the position. Dr Hinshaw also will become a member of the surgical staff of the City of Faith.

The Digital Radiography 1983 National Symposium will take place January 31-February 4, 1983, at the Diplomat Resort & Country Clubs, Hollywood, Florida. The course covers practical aspects of digital radiography and qualifies for 28 hours of AMA Category I CME credit. It is sponsored by the University of South Florida College of Medicine and the Florida Radiological Society. Registration information may be obtained from Norine Karwel, (813) 971-6000, ext. 1112.

The American Society of Internal Medicine has published *Risk Management in Practice* for physicians and their staffs. Written by Dorothy Rasinski, MD, JD, this practice management guide is a comprehensive eight-page manual that discusses the "nine Rs" of malpractice prevention: rapport, rationale, records, remarks, Rx's, res ipsa loquitur, respect, results, and risks. It also cites the five common causes for legal action against physicians and the four requirements that a plaintiff must meet in order to be successful in a professional liability lawsuit. The guide was published initially as a special insert in the May 1982 issue of *The Internist*. It is available separately to nonmembers by mailing \$2 to ASIM at 1101 Vermont Avenue, NW, Suite 500, Washington, DC 20005. Bulk quantities (100 minimum) are available at a discount.

The annual meeting of the United States — Canadian Division of the International Academy of Pathology will be held, Monday to Friday, February 28-March 4, 1983, at the At-

lanta Hilton, Atlanta, Georgia. The Maude Abbott Lecture, titled "There Is a Tide in the Affairs of Men: Urinary Backflow and the Kidney," will be delivered by Dr Robert H. Heptinstall on March 1. Scientific papers, poster sessions, 12 specialty conferences, and 46 short courses are scheduled. Two new special courses will be offered on "Advances in the Application of Immunocytochemistry to Diagnostic Surgical Pathology" and "Diagnostic Cellular and Molecular Pathology." The meeting also will feature a session on "The Kaposi Sarcoma-Opportunistic Infection (KS-OI) Syndrome." Information about the meeting may be obtained from Dr Nathan Kaufman, Secretary-Treasurer, United States — Canadian Division of the International Academy of Pathology, 1003 Chafee Avenue, Augusta, Georgia 30904, (404) 724-2973.

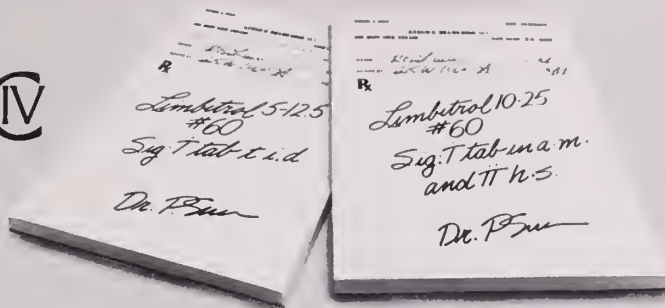
The Greater Oklahoma City Hospital Council elected the following officers for one-year terms that began October 1: president — Richard Luttrell, administrator, Norman Municipal Hospital; vice-president—Bobby Thompson, administrator, Moore Municipal Hospital; and secretary-treasurer — Dolores Wiggins, administrator, Willow View Hospital.

The first nationwide electronic medical information network. AMA/NET, was formally unveiled in September. The AMA is the principal provider of information for the General Telephone & Electronics Corporation (GTE) Telenet Medical Information Network. Through AMA/NET, AMA plans to offer a computer-based program of clinical and socioeconomic information to physicians and other health care professionals. Besides obtaining information from AMA/NET, subscribers to the program will be able to communicate with one another through an electronic mail service created by GTE Telenet Communications Corporation, a GTE subsidiary. □

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Limbitrol contains both amitriptyline, specific for symptoms of depression, and a benzodiazepine, specific for the symptoms of anxiety. Thus it is a better choice than other dual agents for anxious depression that contain a phenothiazine, a class of antipsychotic drugs less specific for anxiety and now generally avoided in nonpsychotic patients.^{2,3}

Avoids the risk of tardive dyskinesia carried by the phenothiazine combinations

The causal relationship between the phenothiazines and other extrapyramidal side effects, including tardive dyskinesia, is well established. In contrast, the reported incidence of these adverse reactions with Limbitrol or either of its components is rare.

References: 1. Clagham J: *Psychosomatics* 11:438-441, Sept-Oct 1970. 2. Rickels K: Drug treatment of anxiety, in *Psychopharmacology in the Practice of Medicine*, edited by Jorvik ME. New York, Appleton-Century-Crofts, 1977, p 316. 3. Boldessarini RJ, Tarsy D: Tardive dyskinesia, in *Psychopharmacology: A Generation of Progress*, edited by Lipton MA, DiMascio A, Kilham KF. New York, Raven Press, 1978, p 999.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of moderate to severe depression associated with moderate to severe anxiety.

Contraindications: Known hypersensitivity to benzodiazepines or tricyclic antidepressants. Do not use with monoamine oxidase (MAO) inhibitors or within 14 days following discontinuation of MAO inhibitors since hyperpyretic crises, severe convulsions and deaths have occurred with concomitant use, then initiate cautiously, gradually increasing dosage until optimal response is achieved. Contraindicated during acute recovery phase following myocardial infarction.

Warnings: Use with great care in patients with history of urinary retention or angle-closure glaucoma. Severe constipation may occur in patients taking tricyclic antidepressants and anticholinergic-type drugs. Closely supervise cardiovascular patients (Arrhythmias, sinus tachycardia and prolongation of conduction time reported with use of tricyclic antidepressants, especially high doses. Myocardial infarction and stroke reported with use of this class of drugs.) Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving).

Usage in Pregnancy: Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Since physical and psychological dependence to chlordiazepoxide have been reported rarely, use caution in administering Limbitrol to addiction-prone individuals or those who might increase dosage, withdrawal symptoms following discontinuation of either component alone have been reported (nausea, headache and malaise for amitriptyline, symptoms [including convulsions] similar to those of barbiturate withdrawal for chlordiazepoxide).

Precautions: Use with caution in patients with a history of seizures, in hyperthyroid patients or those on thyroid medication, and in patients with impaired renal or hepatic function. Because of the possibility of

suicide in depressed patients, do not permit easy access to large quantities in these patients. Periodic liver function tests and blood counts are recommended during prolonged treatment. Amitriptyline component may block action of guanethidine or similar antihypertensives. Concomitant use with other psychotropic drugs has not been evaluated; sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precautions about pregnancy. Limbitrol should not be taken during the nursing period. Not recommended in children under 12. In the elderly and debilitated, limit to smallest effective dosage to preclude ataxia, over sedation, confusion or anticholinergic effects.

Adverse Reactions: Most frequently reported are those associated with either component alone: drowsiness, dry mouth, constipation, blurred vision, dizziness and bloating. Less frequently occurring reactions include vivid dreams, impotence, tremor, confusion and nasal congestion. Many depressive symptoms including anorexia, fatigue, weakness, restlessness and lethargy have been reported as side effects of both Limbitrol and amitriptyline. Granulocytopenia, jaundice and hepatic dysfunction have been observed rarely.

The following list includes adverse reactions not reported with Limbitrol but requiring consideration because they have been reported with one or both components or closely related drugs.

Cardiovascular: Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke.

Psychiatric: Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania and increased or decreased libido.

Neurologic: Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns.

Anticholinergic: Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract.

Allergic: Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus.

Hematologic: Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia.

Gastrointestinal: Nausea, epigastric distress, vomit-

ing, anorexia, stomatitis, peculiar taste, diarrhea, black tongue.

Endocrine: Testicular swelling and gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female and elevation and lowering of blood sugar levels.

Other: Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling.

Overdosage: Immediately hospitalize patient suspected of having taken an overdose. Treatment is symptomatic and supportive. I.V. administration of 1 to 3 mg physostigmine salicylate has been reported to reverse the symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment.

Dosage: Individualize according to symptom severity and patient response. Reduce to smallest effective dosage when satisfactory response is obtained. Larger portion of daily dose may be taken at bedtime. Single h.s. dose may suffice for some patients. Lower dosages are recommended for the elderly. Limbitrol 10-25, initial dosage of three to four tablets daily in divided doses, increased to six tablets or decreased to two tablets daily as required. Limbitrol 5-12.5, initial dosage of three to four tablets daily in divided doses, for patients who do not tolerate higher doses.

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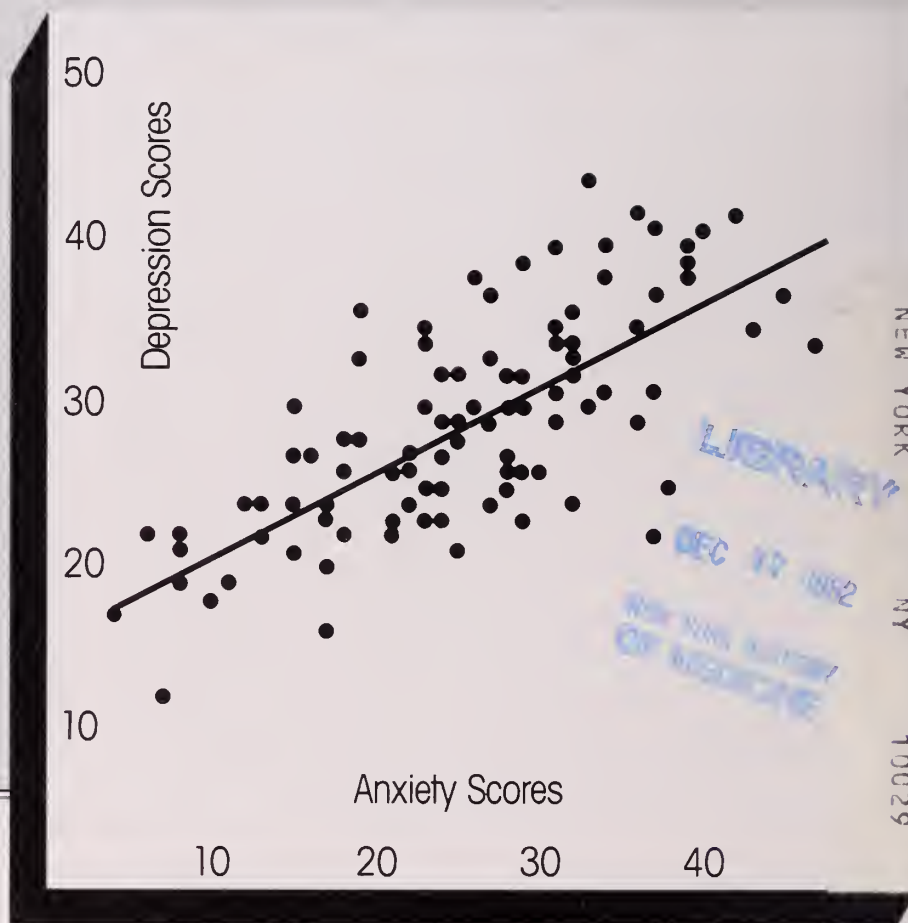


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—Adapted from Claghorn J¹



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1. Claghorn J. *Psychosomatics* 11:438-441, Sept-Oct 1970

Please see summary of product information on inside cover.

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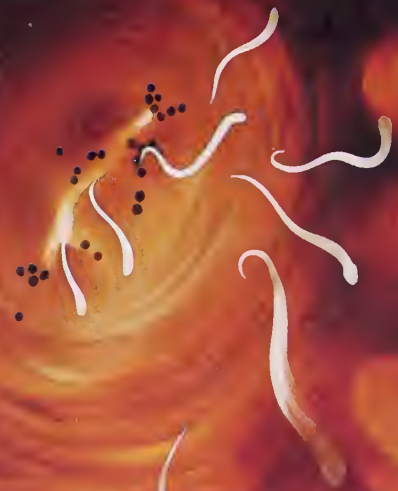
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(Cover Art by Graphic Art Center, Oklahoma City)

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Artist's interpretation:

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The drug has not been extensively studied in children under two years; therefore, in the treatment of children under the age of two years, the relative benefit/risk should be considered.

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References 1. Pitts NE, Migliardi JR: *Clinical Pediatrics* 13:87, 1974. 2. Modell W: *Drugs of Choice* 1980-1981. C. V. Mosby Co., St. Louis, 1980, p. 362. 3. Goodman LS, Gilman A: *The Pharmacologic Basis of Therapeutics*, 6th edition, MacMillan Publishing Co., Inc., New York, 1980, p. 1032.



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our best wishes for
A Joyous Holiday and
A Happy New Year.

The traditional fee-for-service practice of medicine, with patient free choice of physician and hospital has changed rapidly during the past decade, and the trends all indicate this change will continue to proceed rapidly in the direction of increasing hospital control of medical practice. Multiple forces outside the medical profession and hospital administration and governing boards are exerting great influence on the manner in which hospitals provide services and the options available to physicians to provide medical care to patients. It is certainly possible, and even likely, that such multiple pressures could induce hospitals to initiate actions independent of the medical staff which could be disastrous to quality medical care, to the accessibility of care, and to further the concept of rationing of care. A most immediate result could be the removal of the poor from the mainstream of medical care, substituting a much lower and tiered level of both hospital and physician care.

The changing medical care environment during the 1970's has seen an increase in the number of physicians from 152 to 194 per 100,000 population in 1980; the number of medical groups has increased by 4,500; an increase in multi-hospital systems; an increase in the number of for-profit hospitals; an increasing dependence on the hospital and its technologies for the delivery of medical care and an increasing number of physicians entering into full time or part time negotiated contracts with hospitals and other health care facilities. Expectations for the future resulting from these trends indicate an increasing number of multiple hospital systems; expansion of hospital services in such areas as ambulatory care, emergency centers, satellite clinics, etc.; open competition between hospitals and other health care facilities will increase; as competition increases the number of



hospitals will decrease due to mergers and closures.

Recognizing these facts, the Board of Trustees of the American Medical Association has proposed that the House of Delegates create a Section on Hospital Staff Membership, with a Delegate to the House. This proposal is still in the planning stage, and will probably reach fruition at the Interim Session in December.

Many physicians feel that there has been a deterioration in medical staff/hospital administration relationships during the past several years. They feel a lack of medical staff voice in hospital planning and in governing board decisions; competition between hospital ambulatory services and office-based practice; diversification of the hospital into other profit-making activities contrary to good medical practice; and that the interpretation of and compliance with JCAH standards is not done in the best interests of good medical practice.

Cost containment measures initiated by the Department of Human Services are about to bring many of these stresses and conflicts into focus, and will require great patience, cooperation and upholding of medical principles to maintain quality medical care, effective rapport between medical staff and hospital administration, and to preserve in every way possible a free-choice medical care system. Certainly, we all must and do change with our times, but the preservation of the best medical care system in the world deserves our best efforts. Few physicians want to run a hospital; most want to deliver patient care and to see that medical decisions are made by doctors and not by business people. Our close involvement with medical staff duties and responsibilities, and our determination to preserve quality medical care in our hospitals should be the individual physicians effort in solving this expanding and emergent problem.

John A. Montoye MD



Dr Wilkins flips through a current register of neurosurgeons in the United States illustrating how the specialty has grown since he entered it. At that time, he was one of only 35 such specialists in the nation.

Almost a decade after his retirement from medical practice, Harry Wilkins, MD, Oklahoma's first neurosurgeon continues to earn respect and admiration for his accomplishments from physicians throughout the state and internationally.

A mention of his name draws accolades from those who studied under him at the University of Oklahoma Medical School and from physicians who worked with him during the years he was in private practice in Oklahoma City.

A mention of his name evokes expressions of love, respect and gratitude from former patients and members of their families.

All of this pleases but somewhat surprises the quiet man from Mena, Arkansas, who has been labeled the "Father of Neurology" in Oklahoma.

Leaders in Medicine — Harry Wilkins, MD

Judy Leitner

When he left his hometown more than 60 years ago, Dr Wilkins knew only that he wanted to become a physician and that he had a "good possibility of gaining employment" in Norman, OK, so he enrolled at the University of Oklahoma. He earned a bachelor's degree in pre-medical studies in 1925.

The employment turned out to be a job as a waiter and dishwasher at a sorority house where he worked for two years before moving on to a fraternity house where he was attracted by higher wages.

"It paid better, offered better hours but provided less entertainment," remembers Dr Wilkins, his eyes twinkling.

Dr Wilkins received his MD from the OU Medical School in 1927. He served his internship at Kansas City General Hospital in 1927-28. It was during his internship that he met his wife-to-be, Loretta, who was then working in the hospital's radiology department as an x-ray technician. The couple celebrated their 54th wedding anniversary in August, 1982.

While in Kansas City, Dr Wilkins observed the work of Dr Frank Teachenor, a renowned

surgeon who was a member of the hospital's staff. Teachenor was practicing neurosurgery, still in its infancy in the United States. That exposure to the specialty was enough to pique the interest of the young Dr Wilkins who had at first considered specializing in orthopedics. He had worked as an "extern" during his medical school years at McBride Bone and Joint Hospital.

Dr Wilkins learned through a fellow resident of an opening in a three-year fellowship program in neurosurgery under a pioneer in the field, Ernest Sachs, MD, at Washington University, Barnes Hospital, St Louis.

Neurosurgical Skills a Rarity

When Dr Wilkins returned to Oklahoma City in 1931 to establish his practice, there were only about 35 neurosurgeons in the United States and very few of them were located west of the Mississippi River.

Because he felt keenly the need for more physicians trained in this relatively new field, and because of his exposure to Drs Sachs and Teachenor in teaching settings, Dr Wilkins elected to teach as well as to practice neurosurgery and neurology.

The opportunity to teach and to become an innovator brought Dr Wilkins back to his alma mater. He was immediately appointed an associate professor of surgery and a staff member at University and Children's Hospitals and several private Oklahoma City hospitals.

For the first month following his return in

"Nuns at St Anthony Hospital . . . soon got used to seeing Dr Wilkins visiting his patients during all hours of the day and night."

1931, Dr Wilkins recalls that he was "not overwhelmed" with work, but before long, his case load had escalated to the point that he was performing several different types of neurosurgical procedures in one day.

Such a schedule was a harbinger of what was to come.

"Good, hard work and long hours were his long suit," says Loretta Wilkins.

Nuns at St Anthony Hospital, where Dr Wilkins admitted most of his private patients during the early days of his practice, soon got



The ready smile is another Wilkins' trademark

used to seeing Dr Wilkins visiting his patients during all hours of the day and night.

In addition to his faculty appointments, Dr Wilkins was chief of neurosurgery at University and Children's Hospitals. He also carried a patient case load at Veterans Administration Hospital.

During the most active period of his career, Dr Wilkins would begin a typical day early in the morning, long before daylight, a habit his wife says he continues to this day. By rising before the sun, Dr Wilkins said, he could spend the quiet time preparing for the surgical procedures he would perform that day. If no operations were scheduled, he would use the time to catch up on his reading while he enjoyed his coffee.

He always took time for a good, big breakfast because often it would have to last him until he could return home at night, says Mrs Wilkins. "I always suspected if he ate lunch, it was a sandwich on the run between rounds or the medical school classes," she said.

Paying her husband a tribute that has been paid by many others, Mrs Wilkins said, "With Harry, his patients always came first. He was purely dedicated to them."

Because many neurosurgical procedures take a long time to perform — anywhere from one to six hours — Dr Wilkins would try to schedule his procedure early in the morning. He would attend to teaching duties at the medical school, spend time with the residents in his specialty-training program and attend outpatient clinic at least once a week. In the even-

"When Dr Wilkins returned to Oklahoma City in 1931 to establish his practice, there were only about 35 neurosurgeons in the United States, very few of whom were located west of the Mississippi River."

ings, he would act as a consultant to physicians across the state and often in a multi-state region on neurosurgical or neurological problem cases.

Equipment and Instruments Needed

When he was preparing to set up his practice, Dr Wilkins saw the need for obtaining



One of the many awards which hangs in his living room is a limited edition plate struck to honor distinguished professors at the University of Oklahoma.

electrocautery equipment to help control hemorrhage during surgery. Soon after his arrival at University Hospital, a Bovie knife, just such an electrocautery unit, was purchased.

Its use proved so beneficial to his patients that Dr Wilkins purchased a Bovie knife for his own use at St Anthony Hospital. The instrument, which stood four feet high and as wide as an average table, was so large that it was impractical to move. Soon, a similar unit was obtained for VA Hospital.

Once he was able to obtain the essential portable equipment, including a portable cautery, Dr Wilkins was called upon to perform neurosurgery throughout the state and beyond.

At the beginning of Dr Wilkins' career instruments were available to open the skull, to enter the spine and to complete nerve grafts. The arrival of a portable unit that provided electric current for sealing vessels to stop bleeding and the advent of the electric knife for cutting out tumors really advanced neurological surgery, Dr Wilkins said.

Before the popularization of neurosurgery as a specialty, some surgeons who had the courage to operate on head injuries such as skull fractures, according to Dr Wilkins, wouldn't

tackle surgery for a brain tumor or a spinal cord injury. It was his beloved professor, Dr Sachs, a product of German training who first made any surgical inroads in these areas in the United States.

The field of specialty known as neurology came about, Dr Wilkins said, because not all disorders involving the nervous system require surgery.

Even though physicians in neurosurgery and neurology are in separate departments in most hospitals and institutions, they have always made use of each other's skills, Dr Wilkins said.

Dr Wilkins has practiced both specialties. After he retired from surgery in September 1966, he continued to practice neurology until his retirement from medicine in December 1974.

Training Program Initiated

Dr Wilkins was named clinical professor of neurological surgery in July 1943 and became professor in 1946. In that year he began a training program for neurological surgery at the University of Oklahoma School of Medicine, working with his partner, Jess D. Herrmann, MD. Through this program were trained many of the neurosurgeons in practice in Oklahoma today, as well as many who are practicing throughout the United States.

The names of Wilkins and Herrmann became linked when Dr Herrmann was a medical resident at St Anthony in 1932-33. Herrmann became interested in neurology while examin-

"Before the popularization of neurosurgery as a specialty, some surgeons had the courage to operate on head injuries such as skull fractures, but . . . most wouldn't tackle a surgery for a brain tumor or a spinal cord injury."

ing the neurosurgical patients admitted to the hospital. Because most housestaff members did not wish to participate in long neurosurgery operations, he began assisting Dr Wilkins in



Former students of Dr Wilkins will recognize this familiar gesture of scratching his head as he formulates an answer to the interviewer question.

surgery. Their unofficial association was the embryo of a formal preceptorship.

The two physicians continued to work and practice together through four decades; today, their close, personal friendship endures even though Dr Herrmann has retired to a lake home in Arkansas. Before they retired from surgery, the two had operated on over 1,000 patients with brain tumor.

As he did with Dr Herrmann, Dr Wilkins conducted most of his teaching in the operating theater. "However, I always felt the conduct of classwork was an important way to spread information in the neurological field," he said. For this reason, he never tired of lecturing to students at the medical school.

The neurological training program at the University of Oklahoma is one of the best in the nation, Dr Wilkins claims, and it is a source of great personal pride. It is fitting that his alma mater recognized his contributions to that program when on May 13, 1977, Dr Wilkins was presented a Distinguished Service Citation in ceremonies at the University's main campus in Norman, OK. He was the fourth physician to be so honored since the university began awarding them in 1948.

Neurosurgical Practices Expand

Although diagnostic and technical aids developed during recent years had had dramatic effects on neurosurgery, it was the advent of antibiotics that provided the greatest benefits to treatment of neurological conditions, according to Dr Wilkins.

During his career, he witnessed an expansion in the number of practicing neurosurgeons never dreamed of when he entered the field. Now, most states have sufficient numbers of well-trained neurosurgeons.

When he came to Oklahoma City, Dr Wilkins was the only certified neurosurgeon in practice south of Kansas City and west of the Mississippi, he said. Before he arrived, those patients who could stand the trip were sent to Kansas City or St Louis to receive treatment.

Through the years the practice of neurosurgery has improved with technical advancements but the types of patients cared for hasn't really changed.

"The practice still includes care for those with injuries to the head, the brain, those with damaged nerves in the arms and legs, and spinal cord injuries caused by one means or another," he said.

If asked how to prepare to become a neurosurgeon today, Dr Wilkins said he would advise medical students to get the best background possible in medical and surgical education and then to obtain instruction from "someone with a good reputation in neurosurgery who can properly advise how to align yourself."

He advises those in the specialty to keep up with the works of others in the field through participation in annual meetings of various neurological surgeons' groups and programs offered at the medical schools.

A freshman medical student interested in neurosurgery "should bear down on spending most of his or her time understanding nerve responses in the patients and should pay particular attention to faculty members in neurosurgery," Dr Wilkins said.

Judy Leitner received her Bachelor of Arts degree in Journalism from the University of Oklahoma in 1969 where she was listed on the Dean's Honor Roll. She has been a writer and reporter for various publications in Oklahoma and Washington, DC and the recipient of many honors and awards.

Profession Honors Dr Wilkins

Dr Wilkins has received many honors in his lifetime, beginning in 1933 when, shortly after his return to Oklahoma, he was invited to become a member of the Harvey Cushing Society, now known as the American Association of Neurological Surgeons. Seventeen years later, association members elected him Vice-President of the prestigious organization. He was elected President of the group in 1954.

"Although diagnostic and technical aids developed during recent years have had dramatic effects on neurosurgery, it was the advent of antibiotics that provided the greatest benefits to treatment of neurological conditions."

He also was President of the Southern Neurosurgical Society in 1951 and President of the Society of Neurological Surgeons in 1962-63, both highly-esteemed national neurosurgical organizations. In 1956, he served as President of the Oklahoma City Clinical Society and the Oklahoma City Surgical Society.

One of the honors that is most cherished by Dr and Mrs Wilkins was bestowed upon him in 1969 by his own Oklahoma State Medical Association (OSMA). He was made a Life Member of the association and was honored for his contributions not only to medicine but to mankind.

In a ceremony held at the Faculty House in Oklahoma City, near the medical center he has loved and served so well, Dr Wilkins was honored by OSMA. He was presented a gold-headed cane, in keeping with an English tradition of honoring extraordinary performance among medical practitioners and teachers, by Scott Hendren, MD, the OSMA president.

According to tradition, Dr Wilkins will pass the cane along someday to a student he determines to be outstanding.

The OSMA citation honoring Dr Wilkins refers to him as "a stimulating teacher, an exceptional surgeon, a compassionate human being and a true gentleman." It noted that despite "an exhaustive neurosurgical practice as the

Wilkins / LEITNER

pioneer of his specialty in a multi-state region, Dr Wilkins contributed further to the public welfare by establishing a neurosurgical training program through which he unselfishly shared his technical knowledge and was a professional inspiration to all students and others who were privileged to be associated with him"

Reflections

In looking back, Dr Wilkins cannot recall ever being interested in anything other than medicine. "I never seriously considered any other career because I had no interest otherwise."

He and his brother, Bill, grew up on their parents' farm about five miles outside of Mena, Arkansas. They attended a one-room school near their home. Bill, who also was good with his hands, became a fine mechanic and owned and operated a garage for many years.

Dr Wilkins speaks with obvious pride of the early training he received from his parents,

Jesse and Esther Wilkins, of his wife Loretta and of the accomplishments of his daughters and his grandchildren.

He also is proud of his association with the University of Oklahoma. When asked about the many accomplishments of his career, he singled out that relationship.

"Above all, I think that an association with the university medical school has been very high on my scale of satisfaction."

He said he would tell physicians that they can combine private practice with an association with a medical school and receive satisfaction from both.

Now his days are filled with reading, light yardwork, and reflecting on his career. He and Mrs Wilkins are active in their church but have few other outside interests. After all, even though he officially had every Thursday afternoon off, he rarely got a chance to take it.

As a youngster, Dr Wilkins liked to hunt rabbits, squirrels and deer that abounded near his home. He also liked to fish the creeks and rivers in the Mena area.

"I used to have a golf bag and clubs but they just took up space because I never seemed to



Dr Wilkins says one of the major accomplishments of his life is his 54-year marriage to his wife Loretta.

find time to use them," he admits. His records indicate that during most of his career, he averaged 20 or more operations a month.

"I got my exercise walking through the halls of the hospitals," he said.

At one time or another during his career, he was on the staff of most of the hospitals in Ok-

"The OSMA citation honoring Dr Wilkins referred to him as 'a stimulating teacher, an exceptional surgeon, a compassionate human being and a true gentleman.' "

lahoma City and he made daily rounds at each hospital.

He went to extraordinary lengths to respond to those who needed his care. He remembers once flying to Texas in an open cockpit plane during the middle of winter to see a patient who had suffered a head injury in a car accident.

Dr Wilkins celebrated his 78th birthday in September. He says there is nothing he would change about his life even if given the chance. His career has given him satisfaction and his family has given his support and happiness.

"I've been very fortunate," he said.

Dr Wilkins for many years sat on the examining board of the American Board of Neurological Surgery. Because the first examinations for certification by the board were not held until 1940, long after he had been in practice, Dr Wilkins, then professor of neurosurgery at the university, did not become board certified until after his student, Dr Herrmann, certified in the first group to take the certification examination.

Dr Wilkins successfully completed the examination in 1942 and became certified two years after his student had earned certification.

A fellow of the American College of Neurosurgery, Dr Wilkins now carries the title of Professor Emeritus of Neurosurgery at OU, an honor which was bestowed upon him at the time of his retirement.

During his term as President of the Harvey Cushing Society, Dr Wilkins traveled to England and France, making contact with neurosurgeons in London and Paris. He once spent five weeks in Europe working and studying there with leading men in his field.

Students at the OU Medical School and the state's medical community have been fortunate that this quiet, dedicated physician decided to pursue his life's work in Oklahoma.

3505 Meadowbrook Dr., Midwest City, OK 73110.

Intracoronary Streptokinase in Evolving Myocardial Infarction

Jean Pitts, MD

The dissolution of coronary artery thrombi with intracoronary streptokinase appears to be a safe and effective method for non-operative reperfusion of ischemic myocardium in the setting of acute myocardial infarction.

Massive myocardial necrosis is the most common cause of death and morbidity in patients with acute myocardial infarction. Standard medical therapy has attempted to resolve complications which ensue after injury has occurred by reducing myocardial oxygen demand rather than increasing myocardial oxygen supply. A safe and effective method of intervening during the early period of evolving injury to the ischemic heart may reduce myocardial damage. Early restoration of flow through an occluded coronary artery with reperfusion of the ischemic myocardium has been made possible with intracoronary application of streptokinase.

Sudden cessation of blood flow in a major coronary artery causes infarction of the myocardium. Three mechanisms of occlusion — spasm, thrombosis, and plaque hemorrhage — often are responsible. The atherosclerotic plaque, which gradually encroaches on the vessel lumen, is composed of cholesterol and fibrous tissue. Small blood vessels grow from the vasa vasora into the plaque and eventually rupture. If the resulting hemorrhage is great enough, it will extrude through the plaque into the lumen where it initiates clotting.¹ Once the process of bleeding and clotting begins in an already narrowed vessel, acute occlusion can occur. Thrombosis is present in 90% of the patients with acute myocardial infarction.

Intracoronary Application of Agents

The feasibility of rapid lysis of thrombi by local administration of a potent thrombolytic agent was demonstrated in animal experiments. Later this was confirmed in patients with evolving myocardial injury.² The superiority of intracoronary over intravenous application of thrombolytic agents has been demonstrated repeatedly. Infusion of the agent within the occluded artery at the exact site of the clot accelerates lysis, and smaller doses of the agent are required to restore blood flow.

Patients with evolving infarcts most likely to benefit from intracoronary streptokinase infusion must meet certain criteria. The time from onset of chest pain to intervention should not exceed six hours. Although the time lapse from reversible to irreversible injury varies with individuals, significant myocardial salvage is tenuous after six hours. The electrocardiogram must show ST segment elevation of 2.0 mm or more with reciprocal ST segment depression. There should be no contraindication to anticoagulation such as recent stroke or trauma or severe uncontrolled hypertension, and the patient or family must consent to the procedure.

Methods of Infusion

Intracoronary infusion of streptokinase is accomplished using methods similar to diagnostic coronary arteriography. In the catheterization laboratory, a temporary pacemaker is inserted in the right ventricle. A left ventriculogram is done for assessment of ventricular wall motion. The occluded artery is identified by standard arteriography. For patients with anteroseptal infarction, the right coronary artery is visualized first. For patients with inferior infarction, the left coronary artery is visualized first since the right is more likely to be the site of the occlusion. Nitroglycerin is slowly injected into the occluded artery to alleviate spasm. Heparin is given intravenously. For infusion of streptokinase, a 2.5 French radiopaque catheter is inserted through the lumen of the angiography catheter.

"The superiority of intracoronary over intravenous application of thrombolytic agents has been demonstrated repeatedly."

ter. This small, flexible infusion catheter is then carefully advanced down the occluded coronary artery to the site of the thrombus. During infusion, the angiographic catheter remains in the ostium of the coronary artery. The space between its lumen and the outer wall of the infusion catheter permits continuous pressure monitoring and intermittent injection of contrast material to check whether the artery is patent. Streptokinase is injected

at a rate of 2,000 to 4,000 units per minute until arterial patency is achieved. When the artery is reopened, infusion is continued for an additional 60 minutes to prevent rethrombosis. Coronary arteriography is then repeated prior to transfer of the patient to the cardiac intensive care unit.

The angiography catheter is partially withdrawn and left in the femoral artery for 12-to-24 hours since this can be used for aortic pressure monitoring or as an aid to percutaneous insertion of an intra-aortic counterpulsation balloon device should the patient's condition fail to stabilize.

"Although the time lapse from reversible to irreversible injury varies with individuals, significant myocardial salvage is tenuous after six hours."

Patient Prognosis

Experience to date indicates that streptokinase infusion in patients with total occlusion of a coronary artery due to thrombus has a success rate of 70% to 90% in reestablishing blood flow.¹ The prognosis for such patients is directly related to the size and extent of myocardial necrosis which has already occurred. The conviction is growing that a reduction in infarct size can best be achieved by early restoration of blood flow to the endangered zone. The time required for lysis appears to be partly dependent on the duration of symptoms prior to intervention. When blood flow can be reestablished during the early hours of ischemia, microvascular damage and explosive cell swelling are confined to the subendocardial tissue and do not extend into the subepicardium.

Jean Pitts, MD, was graduated from the University of Oklahoma College of Medicine in 1971, where she is presently a clinical instructor in the Department of Medicine. Dr Pitts specializes in internal medicine - cardiology. Among her medical affiliations are the American College of Physicians, American College of Cardiology and American College of Chest Physicians. Her private practice is in Oklahoma City.

Studies suggest ventricular function may turn toward normal after reperfusion as opposed to permanent damage after sustained coronary artery occlusion.³ The European Cooperative Study shows a significant decrease in immediate and six-month mortality in those patients presenting acutely with ejection fractions of less than 35%. This improved prognosis for patients with severely compromised ventricular function presumably is due to recovery of the initially ischemic

"... Streptokinase infusion in patients with total occlusion of a coronary artery due to thrombus has a success rate of 70% to 90% in reestablishing blood flow."

myocardium. Gantz⁴ and associates found improvement in lumen size in patients studied 10-14 days after thrombolysis, suggesting either further lysis or shrinkage of the underlying atherosclerotic plaque.

Restored patency of the artery often results in dramatic relief of chest pain and return toward normal of the electrocardiogram. The procedure has been lifesaving for patients in cardiogenic shock. Pooled data from over 200 patients suggest a reduction of in-hospital mortality to 5% for those successfully treated by intracoronary thrombolysis compared with 15% mortality for patients with transmural infarction in whom thrombolysis was not attempted.⁵

Reperfusion arrhythmias may precede restoration of blood flow, but are treatable. Serious arrhythmias secondary to ischemia often resolve after the occluded coronary artery has been opened. Untoward bleeding has been rare with doses of streptokinase less than 360,000 units, even in patients requiring emergency coronary bypass surgery.

Follow-up Treatment

Follow-up treatment of patients in whom streptokinase infusion has been successful is

dictated by the coronary pathology and the patient's clinical status. In patients with a critically stenosed artery where the risk of reocclusion is great, concomitant coronary angioplasty has been successful in reducing or relieving the stenosis. If the degree of arterial narrowing is noncritical and arterial luminal diameter appears adequate, medical therapy with close observation for recurrence of ischemia may be best. Patients with two or three severely stenosed coronary arteries whose clinical status remains unstable can benefit from emergency bypass grafting. In less urgent cases, stabilization on medical therapy is followed by elective bypass grafting at an appropriate time. Many patients have a stable course after thrombolysis and become asymptomatic or have angina controlled with medical therapy.

Intracoronary streptokinase appears to be an efficient method of alleviating ischemia in the majority of patients with acute myocardial infarction. The effectiveness of restoring blood flow and its relative safety in selected patients with transmural infarction seem established. Preliminary data indicate that this technique may be associated with myocardial salvage, improved ventricular function and decreased mortality without excess risk. Clinical results to date are very promising; however, certain issues remain unclear. The exact time course limits for intervention are presently unknown. The appropriate dosage of streptokinase needed to achieve vessel patency and prevent reocclusion is not defined. Carefully designed, randomized studies will be necessary to evaluate long-term effects of thrombolysis. The potential of intracoronary dissolution of thrombi as a method for nonoperative reperfusion is considerable and clearly has a role in the management of patients with acute myocardial infarction.

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Reducing the Accident Toll Among Young Bicyclists

JOEL ERNSTER, MD
RICHARD H. GROSS, MD

Bicycle accidents result in about 1,000 fatalities per year in the US; about six to nine fatalities occur per year in Oklahoma. Possible applications of educational measures, roadway engineering, bicycle design and law enforcement measures which might reduce the toll of bicycle injuries are discussed.

Accidents continue to be the leading cause of death in children aged 1 to 19 years in the United States.¹ Although most fatalities occur as a result of motor vehicle accidents, about 1000 deaths occur yearly in the US from bicycle mishaps.² The injury rate is considerably higher.

The rate of bicycle ownership in school age children is very high.³ A study in Vermont school children, grades 3 to 6, established bicycle ownership at 80 to 90%; 2% of these children were injured each year (most injuries being very minor).⁴ About 10% of bike accidents involve a motor vehicle, but 80 to 90% of bicycle related deaths result from collision with a motor vehicle. The peak hours of injury are from 2 to 7 PM. Nighttime accidents are relatively rare but more severe. Loose sand or gravel, riding double, riding downhill, and

carelessness in traffic have been found to be associated with frequency of injury.⁵ Younger children are injured on residential streets and driveways. Intersections are particularly hazardous for older and more experienced bicyclists.

Data concerning bicycle accidents are compiled by the National Safety Council (NSC) and the National Electronic Injury Surveillance System (NEISS). This is a computerized tally developed by the Consumer Product Safety Commission to monitor product-related injuries treated in 119 emergency rooms throughout the US. Their methods of estimating the total number of deaths and injuries resulting from bicycle mishaps vary somewhat but are in general agreement that about 1100 to 1200 fatalities occur per year. Estimates of serious injury for the year 1976 though, vary from 1,400,000 from the NEISS to 420,000 from the NSC.

In Cross's extensive study of bicycle injuries in Santa Barbara, males were involved in 71% of non-fatal and 85% of fatal accidents.⁶ He also correlated information from several sources to document that about 60% of all bicycle users were under 19 years of age and that accident involvement of 12 to 15-year-old bicyclists is more than twice what one would expect from the number of bicycle users in this age group. Bicyclists over 60 years of age also suffered an undue proportion of fatalities.

Williams investigated factors involved in the initiation of bicycle-motor vehicle collisions

Accident Toll / ERNSTER, GROSS

(the more severe injuries) in Maryland and found that in more than three-fourths of the collisions, the bicyclist was at fault.⁷ The younger the bicyclist, the more likely he/she was to be responsible for the collision; in 90% of collisions involving children under the age of 12 years, the bicyclist was at fault. In bicyclists over 25 years of age, only 35% of the collisions were caused by the bicyclist. The pervasive effects of the drinking driver are again present; in Cross's study, the motorist had been drinking in 16.9% of the fatal accidents.⁶ In nearly every case, the use of alcohol was judged to contribute to the accident.

"... Accident involvement of 12- to 15-year-old bicyclists is more than twice what one would expect from the number of bicycle users in this age group."

To determine the magnitude and character of this problem in the Oklahoma City area, we undertook a study of bicycle injuries involving children during a seven-month period of 1980 when the peak incidence of bicycle injuries could be expected (spring, summer, and fall).

Materials and Methods

The study team monitored emergency room records from a large metropolitan pediatric hospital (Oklahoma Children's Memorial Hospital) and a suburban community hospital (Edmond Memorial Hospital) from April through October, 1980. All children included in the study were under age 19 years. Families of the injured children were surveyed by telephone to inquire about details of the accident and the injury. Specific information was requested in the following areas:

- A. Bicyclist
 - 1. Age
 - 2. Bicycle education
 - 3. Frequency of bicycle use
 - 4. Familiarity with the bicycle
- B. Accident
 - 1. Type of roadway
 - 2. Riding double or single

- 3. Riding in a group or alone
- 4. Motor vehicle, pedestrian or other bicycle involvement
- 5. Use of the bicycle
- 6. Precipitating factors (hitting an object, speeding, going downhill, learning to ride, spokes, carrying an object, bicycle malfunction)

- C. Injury
 - 1. Severity
 - 2. Injury type
 - 3. Anatomic area
 - 4. Recovery period

A total of 85 bicycle-related injuries and one fatality were evaluated. Of these, 22 individuals could not be contacted or refused to discuss the injury (one parent whose daughter sustained a laceration to her genitals felt the caller was a pervert), so data on injury only were compiled for these accidents. An analysis of the bicyclists, the accidents, determinants of severity, type of injury and anatomic location was performed with the chi square test.

Defining terms in this study:

Severe injuries were hospitalized, *moderate injuries* were fractures requiring casting, *mild injuries* were lacerations requiring sutures or sprains treated with splints, and *very mild injuries* received only observation or rest at home.

Joel Ernster, MD, was graduated from the University of Oklahoma College of Medicine in 1981.

Richard H. Gross, MD, was graduated from Duke University School of Medicine and has been certified by the American Board of Orthopedic Surgery. When work was completed on this article, Dr Gross was associate professor of orthopedic surgery at the University of Oklahoma Health Sciences Center. Presently, he is associated with Harvard Medical School. He is a member of the Pediatric Orthopedic Committee of the American Association of Orthopedic Surgeons and a member of the Pediatric Orthopedic Society.

A *major street* was a four-lane road, a two-lane road with traffic lights, or a section line road (enclosing a one square mile section).

A *busy side street* was two-lanes with other streets yielding at intersections.

A *residential street* had no commercial establishments and yielded to busy side streets.

A *new bike* was less than six-weeks old.

We did not attempt to evaluate the effect of "high rise" banana seat bikes on injury in this study. Although this type of bike design has been associated with increased injury,⁸ it is also most frequently used by boys in the age group most susceptible to injury.⁹

Study Results

Sixty percent of the injuries occurred in the age group from 5 to 10 years. (Table I) The types of injuries sustained are listed in Table II.

Accidents on residential streets accounted for 46% of the total, only 8% were on major streets. (Table III)

Collision with, or avoiding a collision with a pedestrian occurred in 3%, and with a motor vehicle 26%.

Eighty-seven percent of the accidents occurred during afternoon and evening hours, only 3% were at night.

Major contributing factors are listed in Table IV and correlate well with those found in previous studies.

The severity of injury is depicted in Table V.

Severity of injury was not significantly related to age, history of bike education, or frequency of bike use. Of nine severely injured bicyclists, however, six were riding a new or borrowed bike, and six rode for more than one hour per day. Collision with a motor vehicle and riding downhill were also correlated with severity ($p < .05$). The anatomic site of injury

TABLE II

INJURY TYPE (Most Severe Injury Sustained)	
Abrasions	19%
Lacerations (requiring sutures)	24%
Contusions/Sprains	19%
Fractures	17%
Head	16%
Head with Skull Fractures	5%

(Table VI) was correlated with age, with riders under ten years of age sustaining injuries to the trunk and genitals, and over age ten years, the limbs ($p < .01$). Six spoke injuries to the ankle occurred and were highly correlated ($p < .01$) to riding double. All recovered in three weeks or less, and no skin grafts were required. In three cases, genital lacerations occurred in children learning to ride.

Riding in a group apparently had some protective value for severe injury and did appear to be correlated with less serious injuries. Injuries associated with riding in a group were a result of speeding, hitting an object, or doing tricks. Most occurred on sidewalks, driveways, fields, or residential streets. Seventy-one percent did not recall having any bicycle education, and 55% of the injured children were using either a new or borrowed bike.

The one fatality in this series was a 9-year-old boy who entered a residential street from a commercial parking lot and was struck by a large truck. (This injury exemplifies the "bicycle rideout" problem described by Cross.)

There also was considerable social cost to this family. After unsuccessful attempts at telephone contact, a social worker made a home visit and found that after the accident the family had obtained an unlisted telephone number and did not accept the police report that their child had ridden out into the street. They feared that the truck driver was intent on injuring other children in the family who might be riding bicycles.

TABLE I

AGE in YEARS	
< 5	5%
5 - 10	60%
11 - 14	22%
15 - 19	13%

TABLE III

ROAD TYPE	
Major Streets	8%
Busy Side Streets	17%
Residential Streets	46%
Fields/Parking Lots	16%
Sidewalks/Driveways	13%

TABLE IV

PRECIPITATING FACTORS	
Hitting Object	40%
Riding Downhill	29%
Speeding	27%
Doing Tricks	19%
Bicycle Malfunction	11%
Spokes	10%
Riding Around a Curve	10%
Learning to Ride	6%
Miscellaneous	6%

Discussion of Findings

The findings in our survey were generally similar to those already reported in that the majority involved in accidents were males aged 5 to 10 years; the accidents occurred in the afternoon hours; and the accident victims were often riding a new or borrowed bike and rode more than one hour per day. The correlation of severe injury with accidents involving a bicycle-motor vehicle collision has been noted.⁷

The problem of bicycle safety is extremely complex, it appears that many interested in this problem have misconceptions about the character of possible "counter-measures." Controversy is plentiful in the four general areas discussed below.

1. *Bicycle education.* Cross felt that bicycle education by well trained personnel with specific and well formulated objectives is effective, even with children, but that there is a certain age below which a child should not ride in traffic, probably about age eight.⁶

Young children have difficulty estimating the speed of oncoming vehicles,¹⁰ and in a simulated traffic situation tended to believe it was safe to cross a street when the motor vehicle driver in fact would have had little time to stop.¹¹ Sandels believes children under 10 may be too psychologically immature to control a bicycle in traffic.¹²

TABLE V

SEVERITY	
Severe	12%
Moderate	9%
Mild	35%
Very Mild	44%

(1 fatality not included)

ANATOMIC SITE

Lower Extremities	23%
Upper Extremities	22%
Trunk and Genitals	17%
Face and Neck	21%
Head	17%

Scanning the environment for potential accident producing events would be included in the education approach, as would efforts to reduce "bicycle rideout" tendencies, unexpected left turns, riding against traffic, and route selection. These factors are completely under the bicyclist's control and therefore would at least in part be influenced by bicycle education. The "bicycle rideout" problem is particularly critical in children. Children sustain the great majority of these injuries; in Cross's study the average age of bicyclists in fatal rideout from a commercial driveway was 13.8, of those from a residential driveway the average age was 9.8 years. Time, skilled instructors, and money are obviously necessary for an effective education program, but are infrequently available. Education as a part of a community wide comprehensive program has proven effective in Cranford, NJ.¹³

There is also ample evidence that education in other areas has had little effect on behavior regarding health related activity.¹⁴ This is especially obvious when one considers the efforts made by the motoring public to avoid the use of seat belts, or motorcycle helmets. Educational efforts to combat the habit of smoking have been a failure. Other studies have demonstrated that education does not result in fewer childhood injuries or safer homes.¹⁵ This area is obviously unsettled at present, but we feel that programs such as that formulated by Cross would have a beneficial effect in reducing bicycle injuries. Institution of such a program, however, involves a substantial community commitment.

Finally, the correlation of riding a new or borrowed bike with severity of injury in this study would tend to substantiate the beneficial effect of experience in reducing susceptibility to injury. Riding double invites a spoke injury,¹⁶ a practice susceptible to educational efforts.

2. *Roadway engineering.* This term implies construction of bikeways, either separated

from or shared with motor vehicles. The concept of bike paths, separate from motor vehicle traffic, would seem to be an obviously attractive solution, but some experienced bicyclists challenge this concept as untenable. The advantages of separating bicyclists from motor vehicles would obviously eliminate some severe injuries and fatalities, but construction of such bike paths is not practical on a wide spread basis. Since so many injuries and

"The advantages of separating bicyclists from motor vehicles would eliminate some severe injuries and fatalities, but construction of such bike paths is not practical on a widespread basis."

fatalities in children occur in the *neighborhood* as a result of "rideout" injuries, construction of bike paths would most likely be disappointing in reducing mortality from bike injuries in younger age groups. A residential street is no haven from injury or death for the youthful bicyclist. On the other hand, roadway engineering would appear to offer a very real contribution in reducing fatalities in the category of injuries where the motorist overtakes the bicyclist before either driver has time to utilize evasive action. This single category of accident accounted for 25% of all fatalities in Cross's study, about one-half occurring in children.⁶ Sixty percent of these injuries occurred on a narrow "rural-type" roadway with two traffic lanes and no rideable shoulder or sidewalk. Night riding and rural roadways were identifiable hazards, but heavily-traveled urban, two-lane roadways without shoulders are undoubtedly very hazardous for the young bicyclist, are unfit for bicycle traffic at night, and questionably fit during daylight hours.

3. *Bicycle design.* Minimum design standards have been published by the Consumer Product Safety Commission, and the bicycle manufacturers have very nicely complied with these standards.¹⁷ Improvement in frame construction has been noted as a result. Bike design appears to have little effect on injury, but maintenance is quite important. Maintenance, however, is the responsibility of the owner. De-

fective brakes are the only bicycle factor felt to be involved consistently in accidents.⁶

4. *Law enforcement measures.* The legal definition of a bicycle varies from state to state. Thirty-eight states don't regard a bicycle as a vehicle; 13 states say bicyclists are subject to traffic laws.¹⁸ Enforcement of such measures as driving against traffic, failure to yield right of way, and improper turning have been found to lower the accident rates in an Illinois community.¹⁹ However, many law enforcement officers regard citing bicycle violations, especially youthful offenders, as an unattractive aspect of their duties.

The problem of bike injuries is obviously extremely complex, involving such disparate factors as roadways, traffic laws, age, skill and experience of the bicyclist, parental attitudes, public education, bike design, and community commitment.

Certainly the child's bicycle should be regarded as a "first vehicle" rather than a toy, a concept encouraged by the American Academy of Pediatrics.²⁰ We would propose that physicians encourage the concept of instructing children and more emphatically, parents, in this attitude, support educational programs for youthful bicyclists and support law enforcement measures designed to reduce dangerous bicycling practices (such as driving against traffic). While the bike path issue is more controversial, it has been shown that two lane heavily-traveled roads without shoulders are extremely hazardous routes for the youthful bicyclist, and at least road shoulders should be constructed. This would provide an "escape" in a congested situation without riding onto loose sand or gravel, or uneven ground, which in themselves increase the likelihood of injury.

"Young children . . . tended to believe it was safe to cross a street when the motor vehicle driver in fact would have had little time to stop."

Although we regard the accident rate in this study as relatively low, institution of the above measures would undoubtedly result in a safer bicycling environment. The physician, as a community leader, can be pivotal in reducing

the risk to his youthful patients, by informing his community of the available countermeasures and encouraging their adoption.

Summary

1. An analysis of 85 injuries and one fatality resulting from bicycle accidents in the Oklahoma City area is presented.

2. Sixty percent of injuries were in the 5 to 10 year age group, 46% occurred on residential streets, only 8% on major streets.

3. Most injuries were minor.

4. Collision with a motor vehicle, riding downhill, and bicycle malfunction were correlated with severity of injury. Six of nine severely injured bicyclists were riding a new or borrowed bike.

5. The fatality occurred as a result of a "rideout" collision from a commercial driveway.

6. Spoke injury was highly correlated with riding double.

7. Educational efforts, roadway engineering, bicycle design, and law enforcement measures all can contribute to lessening the hazard of bicycle accidents involving children.

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Agent Orange Outreach and Advisory Committee

The Oklahoma State Department of Health has begun efforts to compile information on Vietnam veterans residing in the state who believe they may have experienced ill health effects due to exposure to agent orange and other herbicides and defoliants used during the conflict in Southeast Asia.

These activities, initiated in response to provisions of HB 1492 passed by the 1982 Oklahoma Legislature, are in keeping with guidance provided by a seven-person Agent Orange Outreach and Advisory Committee, composed of four physicians and scientists and three Vietnam era veterans.

Program efforts will involve a veteran's registration and health history form to provide a basis for estimating the number of Oklahoma veterans who possibly would benefit from the Agent Orange Assistance Program, and the establishment of a registry of possible agent orange exposed persons. The registry may be used in the future in a program of direct education and information services, as well as to define a population at risk for any epidemiological or other studies which may be conducted in the state.

The second program activity, also based on a provision of the statute, involves collection by



News From The Oklahoma State Department of Health

the OSDH of medical records of veterans who wish for these records to be on file with the department. A veteran may obtain a form which includes a signed release and space for a physician, hospital, or clinic to summarize the symptoms, diagnosis (if any), and treatment (if any) pertinent to that veteran. This data also will help define the extent of the agent orange related problems in the state.

The advisory committee also is preparing recommendations concerning additional activities which may be appropriate for inclusion in the current program of education, information, and data collection. Eight to ten other states have active agent orange programs at present. In addition, there are six major medical and epidemiological studies being conducted by the Veterans Administration, the Department of Defense, and other federal agencies.

Physician members of the committee include: William Hughes, MD, Oklahoma City, Owen Rennert, MD, Oklahoma City, and Robert Fogel, DO, Tulsa. □

COMMUNICABLE DISEASES IN OKLAHOMA FOR SEPTEMBER, 1982

DISEASE	September	September	August	TOTAL TO DATE	
	1982	1981	1982	1982	1981
Amebiasis	1	2	1	11	21
Aseptic Meningitis	63	3	13	142	79
Brucellosis	1	3	—	5	6
Encephalitis, Infectious	13	1	3	32	19
Gonorrhea (Use Form ODH-228)	1517	1489	1303	12077	11891
Hepatitis A	66	16	53	526	226
Hepatitis B	40	19	34	263	167
Hepatitis Unspecified	24	20	18	197	112
Malaria	1	—	1	8	7
Measles (Rubeola)	8	—	21	29	5
Meningococcal Infections	—	1	1	24	36
Pertussis	—	—	2	5	2
Rabies (Animal)	13	23	14	159	183
Rocky Mountain Spotted Fever	3	4	9	68	97
Rubella	—	1	—	3	1
Salmonellosis	76	50	56	318	310
Shigellosis	48	80	49	282	317
Syphilis (Use Form ODH-228)	23	10	11	152	127
Tetanus	—	—	—	1	1
Tuberculosis	4	20	19	257	261
Tularemia	3	7	3	26	24
Typhoid Fever	—	1	—	2	5

Sessions on New Technology Set for OSMA Annual Meeting

The scientific program of the OSMA 1983 Annual Meeting will examine advancements in medical technology and treatment that promise to have far-reaching effects on the practice of medicine.

Confirmed topics and speakers for the program include: "New Technology and Developments in Anesthesiology — Brain Oxygen Sensor Equipment," Lennart Fagraeus, MD, Department of Anesthesiology, Duke University; "In Vitro Fertilization," J. Clark Bundren, MD, Tulsa, and Edward Wortham, PhD, Tulsa; and "Nuclear Magnetic Resonance Imaging," C. L. Partain, MD, Department of Radiology, Vanderbilt University School of Medicine. A fourth session being planned will examine new findings in brain biochemistry.

The topics and speakers for the sessions were selected by the scientific program committee based on recommendations from the various specialty societies.

The annual meeting will be held May 4-7, 1983, at the Excelsior Hotel in Tulsa. The sessions on new technology and treatments will be conducted on Friday, May 6. □

OSMA to Sponsor Photo Contest For Annual Meeting Attendees

OSMA members and their spouses will have an opportunity to exhibit their photographic skills at the 1983 annual meeting as the association once again sponsors a photography contest.

Photographs submitted for judging will be on display at the annual meeting host hotel, and entries will be judged the final day of the meeting. Cash prizes will be awarded to the winning entries.

Contest rules and entry guidelines will be included in the annual meeting information

packet to be sent to members after the first of the year.

The last OSMA photo contest was held during the 1980 annual meeting. Top winners that year were Arnold Greensher, MD, Colorado Springs, first place for black and white; D. L. Moore, MD, Tulsa, first place for color; and Stan Muenzler, MD, Oklahoma City, best of show. □

AMA Asks Physicians to Watch For Effects of Agent Orange

Physicians across the country are being alerted by the American Medical Association (AMA) to watch for signs of adverse effects in certain patients exposed to a chemical contaminant of Agent Orange known as TCDD.

Physicians also are being asked to cooperate in collecting vital information needed in the ongoing studies of effects of Agent Orange on humans.

Agent Orange came to prominence during the latter stages of the United States involvement in Vietnam when the herbicidal mixture was sprayed over certain areas of Vietnam to defoliate the jungle.

TCDD, a dioxin compound, was discovered in 1957 to be a contaminant in the manufacture of a chemical precursor of 2, 4, 5-T, one of the principal components of Agent Orange. Inadvertant exposure to the compound caused outbreaks of chloracne — a form of acne prominent on the face — in workmen involved in processing the chemical precursors of 2, 4, 5-T. Since then, data from experimental animals indicate that TCDD is a toxic material.

Other acute toxic reactions to dioxin include liver and kidney damage, increased pigmentation in the skin, an abnormal overgrowth of body hair, weakness in the legs, and depression. Chronic exposure to TCDD leads to degeneration of the liver and thymus in experimental animals.

TCDD can induce cancer or serve as a cancer promoter in some strains of rats and mice.

Beyond the fact that chloracne has been induced in rabbits, mice and monkeys from experimental TCDD exposure, little of the animal evidence is directly applicable to humans. To date there is no conclusive evidence that these substances cause mutations or produce developmental abnormalities in humans. □

OSMA Umbrella Policy Is "Personal Liability" Best-Buy

At a time when liability lawsuits and insurance premiums are on the upswing generally, the OSMA-sponsored Personal Umbrella Liability Program is offering unique coverage at reduced rates to association members.

The OSMA policy has protected about 1,000 physicians since its inception five years ago. It is available through C. L. Frates and Company, the same insurance agency that manages the Physicians Liability Insurance Company; the coverage is underwritten by United States Fire Insurance Company.

A "personal liability" umbrella policy significantly increases the limits of protection above the personal liability coverages found in homeowners policies, automobile policies, watercraft policies, incidental business properties, and employer's liability for farm employees. "Personal liability" involves claims which arise from injury to a person or damage to another person's property.

A personal umbrella policy does not apply to professional negligence.

All certificates through the OSMA program are renewable each January 1. The 1983 renewal features many coverage options.

The "basic" Personal Umbrella Liability Policy under the OSMA group plan costs \$60 annually for \$1 million in additional protection for the following risks and their respective required underlying coverages:

Primary residence (required underlying coverage of \$100,000).

Two automobiles (required underlying coverages are \$100,000 per person, \$300,000 per accident and \$50,000 property damage) Additional automobiles (over two) require only \$10 more annual premium each.

The top coverage limit in 1983 is \$10 million.

As an example, a physician could extend his personal liability protection to \$10 million for his principal home and two automobiles at an annual premium of only \$180.

OSMA's reduced group premium rates for this protection cannot be matched through an individually rated policy, according to the Frates agency. Moreover, the umbrella approach is an inexpensive way for a physician to obtain the high limits necessary to achieve

comfortable security against the personal liability risk.

For more information about the Personal Umbrella Liability Program of the OSMA, a physician may contact C. L. Frates and Company directly, or may work through a local agent of choice. The Frates agency may be reached at PO Box 18839, Oklahoma City, OK 73154, (405) 848-7661. □

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Secretary Brandt Urges Fight Against Sex-Related Diseases

Calling physicians "the first line of defense," Edward N. Brandt, Jr., MD, assistant secretary for health, US Department of Health and Human Services, is urging them to become more aggressive about screening and treating patients for sexually transmitted diseases. Dr Brandt, a native Oklahoman, issued his call to combat the "epidemic of the 1980s and 1990s" in an editorial that appeared recently in the *Journal of the American Medical Association*.

Availability after World War II of antimicrobial drugs effective against the "old" sexually transmitted diseases, primarily syphilis, led physicians to believe that infectious diseases would no longer be a problem in medicine, Dr Brandt noted. He cited this complacency as a reason for the decline since the early 1950s in medical instruction about sexually transmitted diseases.

Physicians knowledgeable about sexually transmitted diseases are exactly what is

needed now, Dr Brandt pointed out. "The epidemiologic features of sexually transmitted diseases have changed," he said, "and the number of diseases categorized as sexually transmitted has climbed drastically."

He cited estimates of the "staggering" annual statistics: 200,000 to 500,000 new cases of genital herpes; 200,000 cases of hepatitis B, a significant proportion of which are sexually transmitted; 3 million cases of trichomoniasis; more than 1 million episodes of pelvic inflammatory disease that lead to 80,000 to 100,000 forced sterilizations among young women; 2.5 million cases of nongonococcal urethritis and related chlamydial infections; 80,000 new cases of syphilis; and 2 million new cases of gonorrhea.

Advances against this epidemic "will require the mobilization of the entire medical community," Brandt emphasized. He encouraged physicians to become more vigilant in detecting and treating sexually transmitted diseases and urged medical schools and associations to improve the quality and quantity of training programs for medical students and residents. □

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An Open Letter To All Physicians With Physical Disability

For the past two years, we have been involved in compiling a resource directory for physicians with physical disability. The work is funded by a grant from the St Paul-Ramsey Hospital Medical Education and Research Foundation. The purpose of the project is to list physicians with various physical disabilities who are willing to provide information and referral services to physicians who incur the same disability and need specific information. Existing rehabilitation programs are simply not equipped to deal with the situation.

The biggest problem we are encountering is poor participation. It is currently estimated that 4% of all physicians are not in active practice because of a physically disabling condition, and that 25% of the physicians have the potential to be rehabilitated into the active practice of medicine. In real numbers this constitutes 1% of the licensed physicians in this country or 4,500 physicians. Our goal is to identify these physicians and encourage their participation.

To date we have placed advertisements in over 100 major medical journals and have had response from less than 200 physicians. In retrospect, it appears this was due to the use of inappropriate terminology in the ads. Physical disability does not imply inability. Our use of the term "handicapped physician" was inappropriate since the majority of physically disabled physicians are not handicapped in their practice of medicine. We apologize for the inappropriate terminology and again ask that all physicians, active or inactive, with any type of physical disability contact Dr Zondlo, St Paul-Ramsey Hospital Medical and Educational Research Foundation, 640 Jackson St., St Paul, MN 55101. The directory will be completed in six to eight months and at that time it will be sent to only those physicians who are listed therein. Upon receipt of your initial response, information forms will be mailed. All correspondence is confidential.

All physicians with physical disability, no matter how small, are encouraged to respond. Information from a doctor with even a minor disability may be of value to another doctor with multiple disabilities. The cornerstone of this project is your participation.

Frank Zondlo, MD ☐

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Deaths

WILLIAM J. CRAIG, MD 1921-1982

Well-known, Oklahoma City pediatrician, William J. Craig, MD, died October 19, 1982. Dr Craig had recently closed his practice in Oklahoma City which had been established in 1960. Born in Pine Bluff, Arkansas, he was graduated from the University of Oklahoma College of Medicine in 1951. Certified by the American Board of Pediatrics, Dr Craig was a Fellow of the American Academy of Pediatrics, a member of the Southern Medical Association and the New York Academy of Sciences.

FLOYD T. HUBBARD, MD 1922-1982

Late word has been received of the death of Floyd T. Hubbard, MD, Anadarko surgeon, who died September 23, 1982. Born in Coyle, Oklahoma, Dr Hubbard was graduated from the University of Oklahoma College of Medicine in 1957. He had been in general practice in Henryetta for 15 years before taking his residency in general surgery. In 1977, Dr Hubbard established his practice in Anadarko.

WESLEY RUSSELL MOTE, MD 1904-1982

Late word has been received by *The Journal* of the death of Wesley Russell Mote, MD. Dr Mote was a retired, Ardmore ophthalmologist who died July 24, 1982. He was graduated from the University of Oklahoma College of Medicine in 1927 and entered general practice in Ardmore. Later he completed his specialty training and returned to Ardmore. Retiring in the late 1970s, Dr Mote moved to Elmore City. Among his survivors is his son, Wesley Robert Mote, MD, Tinker Air Force Base.

CLINTON GALLAHER, MD 1903-1982

Former OSMA President, Clinton Gallaher, MD, died November 15. Since his graduation from Northwestern University Medical School in 1929, he had practiced his specialty, EENT, in Shawnee. He had been very active in medical affairs, serving eight years as secretary of the Oklahoma State Board of Medical Examiners; a member of the OSMA Council; Speaker of the OSMA House of Delegates for eight years; and, President of the OSMA in 1961-62. He was a Founder Member of the Southwestern Surgical Congress, a Fellow of the American College of Surgeons and a member of the World Medical Association. □

In Memoriam

1982

<i>Frances P. Newlin, MD</i>	<i>February 16</i>
<i>James T. Maddox, MD</i>	<i>February 21</i>
<i>Joseph F. Messenbaugh, MD</i>	<i>March 12</i>
<i>James Russell Kreger, MD</i>	<i>April 3</i>
<i>Boyd Vance Lucas, MD</i>	<i>April 9</i>
<i>Carlton E. Smith, MD</i>	<i>April 23</i>
<i>Ella H. Murray, MD</i>	<i>May 3</i>
<i>Loyd G. Williams, MD</i>	<i>May 15</i>
<i>A. A. Walker, MD</i>	<i>July</i>
<i>Wesley Russell Mote, MD</i>	<i>July 24</i>
<i>Thomas H. Fair, MD</i>	<i>August 15</i>
<i>Clyde E. Harris, MD</i>	<i>September 1</i>
<i>Tillman A. Ragan, MD</i>	<i>September 5</i>
<i>Floyd T. Hubbard, MD</i>	<i>September 23</i>
<i>William A. Eastland, MD</i>	<i>October 3</i>
<i>William J. Craig, MD</i>	<i>October 19</i>
<i>Clinton Gallaher, MD</i>	<i>November 15</i>

□

NIH Blood Pressure Group Offers Kit on HBP Control

The National High Blood Pressure Education Program has developed a speaker's kit on "Blacks and High Blood Pressure" to assist individuals making presentations on the subject.

The kit is appropriate for both lay and professional audiences and can be used in conferences, workshops, in-service training sessions, medical society meetings, and community health programs. It includes two modules, one featuring 20 slides that present the HBP control needs of blacks and shows ways to respond to those needs and another with 10 slides outlining recommendations from the National Black Health Providers Task Force for improving high blood pressure control and education in the black community.

Modules can be used separately or in combination and are accompanied by "talking points" that can serve as a script for the slide presentations.

The kit is available for 30-day loan from the High Blood Pressure Information Center, 120/80 National Institutes of Health, Bethesda, Maryland 20205, (703) 558-4800. □

Rural Health Care Conference Slated for March 6-9, 1983

The Sixth National Conference on Rural Primary Care will be held March 6-9, 1983, at the Radisson-Muehlebach Hotel in Kansas City. The conference is being sponsored by the National Rural Primary Care Association (NRPCA) and more than a dozen national health-related organizations.

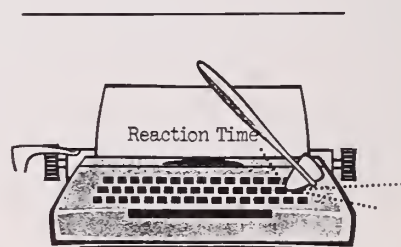
The NRPCA Conference Planning Committee has extended the program to a full three days of events for rural health care professionals. Working with conference hosts, the American Academy of Family Physicians, and national and local organizations, the committee has planned a diverse and comprehensive educational program and an entertaining array of recreational activities.

The workshop program, consisting of more than 50 sessions, will include discussions on health care marketing and management; rural hospitals; migrant health care; paraprofessional issues; and emergency medical

services. A continuing education program is being planned for physicians, nurses, nurse practitioners, physician assistants and dentists.

A new component of the 1983 conference is the Legislative Forum scheduled for Sunday, March 6.

Information on conference registration may be obtained from Carrie Samuel, Conference Coordinator, National Rural Primary Care Association, Box 1211, Waterville, Maine 04901, (207) 873-7784. □



Dear Fellow Physician:

This is an open letter to the *Journal of the Oklahoma State Medical Association*.

About five years ago I had a serious problem requiring extensive surgery. I had an insurance policy that I thought was adequate. It paid the hospital bill rather well but paid nothing to the two fine surgeons who probably saved my life. The kind of surgery they did and the charges they would have made to anyone else were not the sort of thing you could pay with a case of Scotch. My wife and I spent some time trying to decide on an appropriate gift. This was finally accomplished but not without difficulty and some expense.

I took out PLICO in the early part of this year. Shortly thereafter I developed a problem requiring three hospital admissions and two surgeries. PLICO came through in an unbelievable manner even paying outpatient medications which were quite extensive, most of the hospital bill and the doctor bills. This time there was no problem about gifts.

PLICO would be worth the money at twice the premium.

If you do not have PLICO you are missing a good bet. To paraphrase, you can't even afford to stay home without it.

Respectfully,

Richard W. Loy, MD

Book Review

THE MEDICAL DETECTIVES. By Berton Roueché. New York: The Times Co., 1980. Pages 372, \$15.00.

Since the late 1940's, Berton Roueché has captured the interests of readers, both within and outside the health fields, with his medical mystery stories. All of the accounts in this volume have appeared in his feature, "Annals of Medicine" in the *New Yorker*. The chapters in *The Medical Detectives* deal with outbreaks of infectious diseases, toxic agents, and specific illnesses (frequently exotic). In most instances they recount the efforts of physician-experts unraveling the mystery. He describes for us the epidemiologic investigation and the steps in the diagnostic process. Frequently there is an interesting account of the patient's experi-

ence with a particular disease. These stories are frequently told in words of the participants but the author provides considerable local color. Roueché also provides a good deal of general and historical background of the diseases under discussion.

Except for the most recent ones, most of these accounts have appeared previously in books by Roueché, such as *Eleven Blue Men* and *A Man Named Hoffman*. The addition of the more recent ones, however, allows one to follow not only the progress of medicine but the changes in the author's approach over the years.

The Medical Detectives will appeal to general readers as well as those working in the health fields.

Harris D. Riley, Jr., MD ☐

Miscellaneous Advertisements

FOR SALE: Office furniture and equipment: three examining tables, two utility cabinets, one pediatric table with weight and measurement scale, two physician's scales, one stainless steel utility cart, two gooseneck lamps, unimeter-300, centrifuge, Redacrit centrifuge, ECG, autoclave, and miscellaneous items. P. A. MacKercher, MD, PO Box 1110, Ponca City, OK 74602. Phone (405) 765-3359. After 5:00 PM, (405) 765-3871.

PRIMARY CARE PRACTICE OPPORTUNITIES — Family practice, internal medicine, obstetrics/gynecology, pediatric physicians are needed in a growing community which is part of a major metropolitan area. Opportunity exists to join an existing practice or establish an independent practice. Located in the Greater Kansas City Metropolitan Area and near a major 400-bed private general acute care hospital. For further information send inquiry to Key H, *The Journal*, Oklahoma State Medical Association, 601 NW Expressway, Oklahoma City, OK 73118.

PHYSICIAN WANTED to staff minor emergency clinic. Prefer experience in family practice or emergency room. Between 40-50 hours per week, (9-6 or 8-5), limited night and weekend work. Salary negotiable and possibility for partial ownership. Clinic to be opened in new facility between November 15 and January 1. Excellent opportunity and working conditions. All replies confidential. Contact Key G, *The Journal*, Oklahoma State Medical Association, 601 NW Expressway, Oklahoma City, OK 73118.

FOR SALE: X-RAY UNIT, 300 ma, 220v, with all equipment needed for immediate use. \$4,750.00 (918) 336-6160, collect.

FOR SALE: Two Dupaco Anesthesia machines; Palomar, five drawer, two copper kettles, Narco air shield, ventilator controller. Available now. For further information call (918) 683-3819 or (918) 687-1500.

PART TIME OFFICE SPACE available at Village Medical Center or Pasteur Medical Center for medical or surgical specialist. For more information call (405) 232-8965. ☐

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(GN)—General News	(SA)—Special Articles
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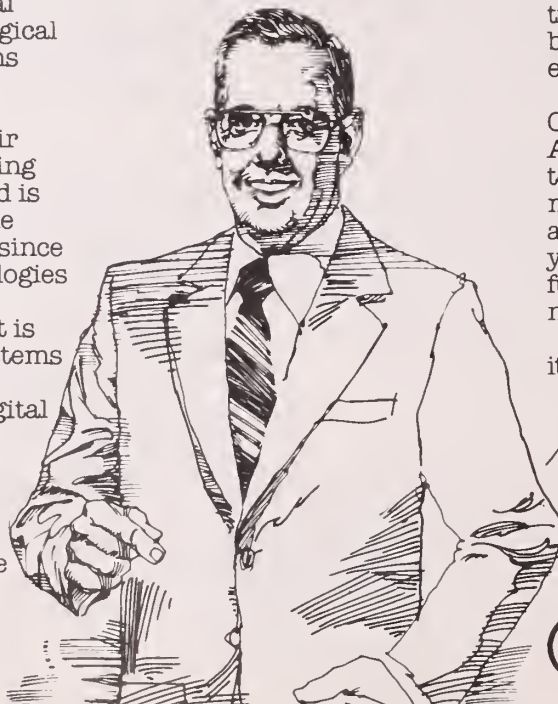
what goes on in the office today is analog (voice). And this will not change dramatically in the near future. So – today and in the near future – a digital switching system will rarely improve transmission quality and speed.

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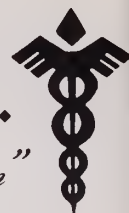
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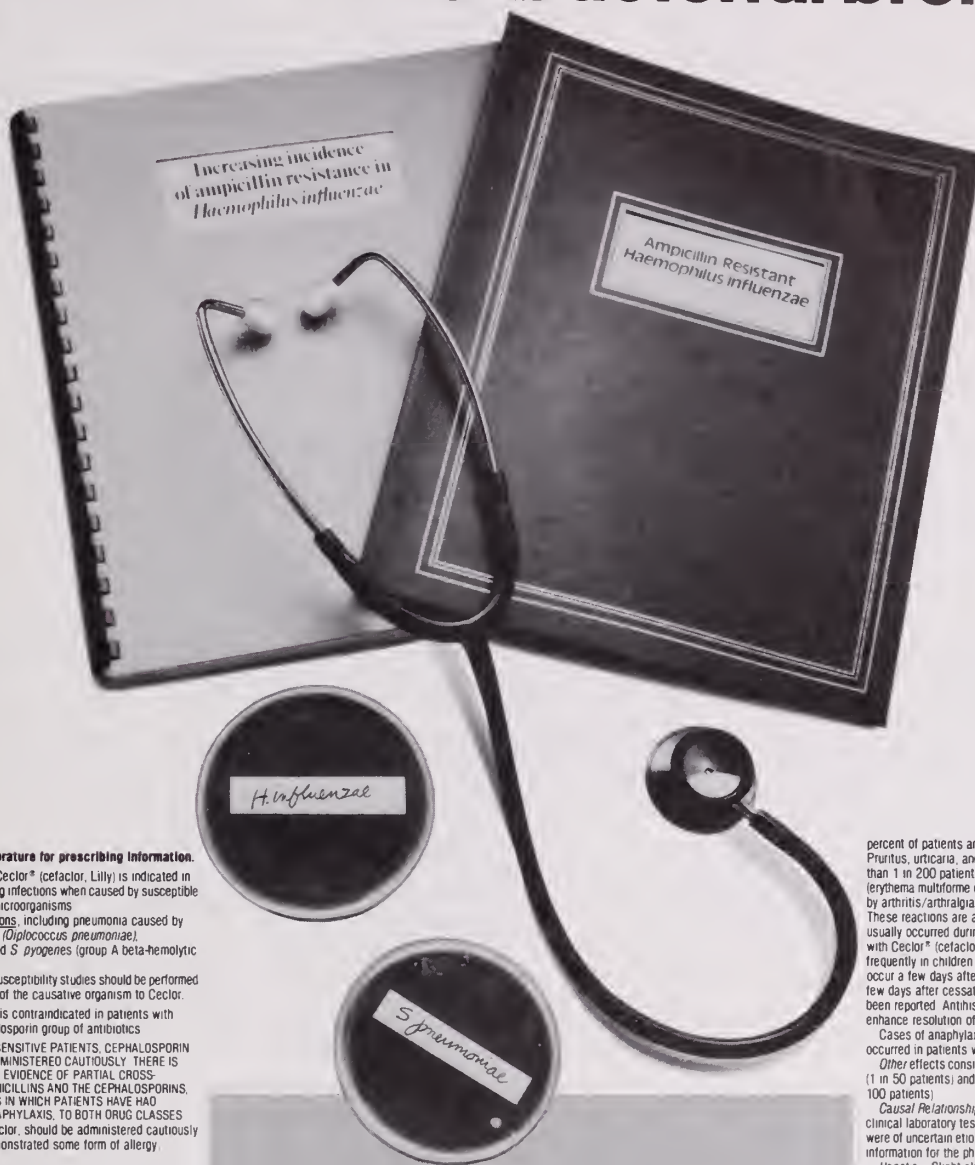
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Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Cefclor.

Contraindication: Cefclor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics.

Warnings: IN PENICILLIN-SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY. THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS, AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS, INCLUDING ANAPHYLAXIS, TO BOTH DRUG CLASSES.

Antibiotics, including Cefclor, should be administered cautiously to any patient who has demonstrated some form of allergy, particularly to drugs.

Precautions: If an allergic reaction to cefclor occurs, the drug should be discontinued, and, if necessary, the patient should be treated with appropriate agents, e.g., pressor amines, antihistamines, or corticosteroids.

Prolonged use of cefclor may result in the overgrowth of nonsusceptible organisms. Careful observation of the patient is essential. If superinfection occurs during therapy appropriate measures should be taken.

Positive direct Coombs tests have been reported during treatment with the cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coomb testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs test may be due to the drug.

Cefclor should be administered with caution in the presence of markedly impaired renal function. Under such a condition, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended.

As a result of administration of Cefclor, a false-positive reaction for glucose in the urine may occur. This has been observed with Benedict's and Fehling's solutions and also with Clinistix® tablets but not with Tes-Tape® (Glucose Enzymatic Test Strip, USP, Lilly).

Usage in Pregnancy: Although no teratogenic or antifertility effects were seen in reproduction studies in mice and rats receiving up to 12 times the maximum human dose or in ferrets given three times the maximum human dose, the safety of this drug for use in human pregnancy has not been established. The benefits of the drug in pregnant women should be weighed against a possible risk to the fetus.

Usage in Infancy: Safety of this product for use in infants less than one month of age has not been established.

Adverse Reactions: Adverse effects considered related to cefclor therapy are uncommon and are listed below.

Gastrointestinal symptoms occur in about 2.5 percent of patients and include diarrhea (1 in 70) and nausea and vomiting (1 in 90).

As with other broad-spectrum antibiotics, colitis, including rare instances of pseudomembranous colitis, has been reported in conjunction with therapy with Cefclor.

Hypersensitivity reactions have been reported in about 15

Some ampicillin-resistant strains of *Haemophilus influenzae*—a recognized complication of bacterial bronchitis*—are sensitive to treatment with Cefclor.¹⁻⁶

In clinical trials, patients with bacterial bronchitis due to susceptible strains of *Streptococcus pneumoniae*, *H. influenzae*, *S. pyogenes* (group A beta-hemolytic streptococci), or multiple organisms achieved a satisfactory clinical response with Cefclor.⁷

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percent of patients and include morbilliform eruptions (1 in 100). Pruritus, urticaria, and positive Coombs tests each occur in less than 1 in 200 patients. Cases of serum-sickness-like reactions (erythema multiforme or the above skin manifestations accompanied by arthritis/arthritis and, frequently, fever) have been reported. These reactions are apparently due to hypersensitivity and have usually occurred during or following a second course of therapy with Cefclor® (cefclor). Such reactions have been reported more frequently in children than in adults. Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.

Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.

Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients).

Causal Relationship Uncertain: Transitory abnormalities in clinical laboratory test results have been reported. Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician.

Hepatic: Slight elevations in SGOT, SGPT, or alkaline phosphatase values (1 in 40).

Hematopoietic: Transient fluctuations in leukocyte count, predominantly lymphocytosis occurring in infants and young children (1 in 40).

Renal: Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200). (100281R)

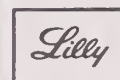
*Many authorities attribute acute infectious exacerbation of chronic bronchitis to either *S. pneumoniae* or *H. influenzae*.

Note: Cefclor is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

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Additional information available to the profession on request from Eli Lilly and Company, Indianapolis, Indiana 46285. Eli Lilly Industries, Inc., Carolina, Puerto Rico 00630.

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Hyoscyamine Sulfate	0.19 mg
Atropine Sulfate	0.04 mg
Scopolamine Hydrobromide	0.01 mg

Ru-Tuss Tablets act continuously for 10 to 12 hours.

Ru-Tuss Tablets are an oral antihistaminic, nasal decongestant and anti-secretory preparation.

INDICATIONS AND USAGE Ru-Tuss Tablets provide relief of the symptoms resulting from irritation of sinus, nasal and upper respiratory tract tissues. Phenylephrine and phenylpropanolamine combine to exert a vasoconstrictive and decongestive action while chlorpheniramine maleate decreases the symptoms of watering eyes, post nasal drip and sneezing which may be associated with an allergic-like response. The belladonna alkaloids, hyoscyamine, atropine and scopolamine further augment the anti-secretory activity of Ru-Tuss Tablets.

CONTRAINDICATIONS Hypersensitivity to antihistamines or sympathomimetics. Ru-Tuss Tablets are contraindicated in children under 12 years of age and in patients with glaucoma, bronchial asthma and women who are pregnant. Concomitant use of MAO inhibitors is contraindicated.

WARNINGS Ru-Tuss Tablets may cause drowsiness. Patients should be warned of the possible additive effects caused by taking antihistamines with alcohol, hypnotics, sedatives or tranquilizers.

PRECAUTIONS Ru-Tuss Tablets contain belladonna alkaloids, and must be administered with care to those patients with glaucoma, or urinary bladder neck obstruction. Caution should be exercised when Ru-Tuss Tablets are given to patients with hypertension, cardiac or peripheral vascular disease or hyperthyroidism. Patients should avoid driving a motor vehicle or operating dangerous machinery (See Warnings).

OVERDOSAGE Since the action of sustained release products may continue for as long as 12 hours, treatment of overdoses directed at reversing the effects of the drug and supporting the patient should be maintained for at least that length of time. Saline cathartics are useful for hastening evacuation of unreleased medication. In children and infants, antihistamine overdosage may produce convulsions and death.

ADVERSE REACTIONS Hypersensitivity reactions such as rash, urticaria, leukopenia, agranulocytosis, and thrombocytopenia may occur. Other adverse reactions to Ru-Tuss Tablets may be drowsiness, lassitude, giddiness, dryness of the mucous membranes, tightness of the chest, thickening of bronchial secretions, urinary frequency and dysuria, palpitation, tachycardia, hypotension, hypertension, faintness, dizziness, tinnitus, headache, incoordination, visual disturbances, mydriasis, xerostomia, blurred vision, anorexia, nausea, vomiting, diarrhea, constipation, epigastric distress, hyperirritability, nervousness, dizziness and insomnia. Large overdoses may cause tachypnea, delirium, fever, stupor, coma and respiratory failure.

DOSAGE AND ADMINISTRATION Adults and children over 12 years of age, one tablet morning and evening. Not recommended for children under 12 years of age. Tablets are to be swallowed whole.

HOW SUPPLIED:

Bottles of 100 Tablets

Bottles of 500 Tablets

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Phenylpropanolamine Hydrochloride	20
Pheniramine Maleate	20
Pyriminamine Maleate	20
Ammonium Chloride	200
Alcohol	

Ru-Tuss Expectorant is an oral antitussive, antihistaminic, nasal decongestant and expectorant preparation.

INDICATIONS AND USAGE Ru-Tuss Expectorant is indicated for symptomatic relief of upper respiratory congestion associated with pharyngitis, tracheitis, bronchitis, and allergic rhinitis. Also, for the temporary relief of symptoms associated with hay fever, allergies, nasal congestion and cough due to the common cold.

CONTRAINDICATIONS Hypersensitivity to antihistamines. Concomitant use of an antidepressant or antidiabetic drug containing a monoamine oxidase inhibitor is contraindicated.

Ru-Tuss Expectorant is contraindicated in patients with glaucoma, bronchial asthma, or in women who are pregnant.

WARNINGS Ru-Tuss Expectorant contains codeine phosphate, therefore, the patient should be warned of the potential that this drug may be habit forming. Ru-Tuss Expectorant may cause drowsiness. Patients should be warned of the possible additive effect caused by taking antihistamines with alcohol, hypnotics, sedatives and tranquilizers.

PRECAUTIONS Patients taking Ru-Tuss Expectorant should avoid driving a motor vehicle or operating dangerous machinery (See Warnings). Caution should be taken with patients having hypertension, diabetes, hyperthyroidism and cardiovascular disease.

Caution should also be used in patients with pulmonary, hepatic or renal insufficiency.

ADVERSE REACTIONS Ru-Tuss Expectorant may cause drowsiness, lassitude, giddiness, dryness of mucous membranes, tightness of the chest, thickening of bronchial secretions, urinary frequency and dysuria, palpitation, tachycardia, hypotension, hypertension, faintness, dizziness, tinnitus, headache, incoordination, visual disturbances, mydriasis, xerostomia, blurred vision, anorexia, nausea, vomiting, diarrhea, constipation, epigastric distress, hyperirritability, nervousness, and insomnia. Overdoses may cause restlessness, excitation, delirium, tremors, euphoria, metabolic acidosis, stupor, tachycardia and convulsions.

DOSAGE AND ADMINISTRATION Adults: 1 or 2 teaspoonfuls, orally, every 4 hours, not to exceed 10 teaspoonfuls in any 24-hour period.

Children 6 to 12 years of age: $\frac{1}{2}$ the adult dose, not to exceed 6 teaspoonfuls in any 24-hour period. Children 2 to 6 years of age: $\frac{1}{2}$ teaspoonful every 4 hours, not to exceed 3 teaspoonfuls in any 24-hour period. Children under 2 years of age: Use as directed by a physician.

HOW SUPPLIED: (16 fl. oz.)

Pint Bottles

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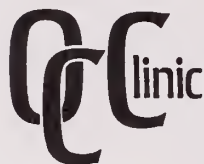
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BACK ISSUES

Microfilm copies of back issues of *The Journal* may now be purchased from University Microfilms International, 300 North Zeeb Road, Ann Arbor, Michigan 48106.

Sharing, Caring, Love and Christmas

No time of the year is as special or weaves such "magic" as does the season of Christmas. Caring and sharing become familiar words as most of our fellow creatures are imbued with an almost abnormal sense of generosity; even the most flint-hearted among us seems to melt and become more generous. The act of giving to others seems to possess us during this time. In experiencing the happiness our giving brings others, we feel a rush or glow, our reward for generosity, bringing its own kind of high. Wouldn't it be wonderful if we could feel this way all year? Isn't this inherent goodness a potential that is given to mankind? If this good feeling is the result of giving, would the giving of a part of one's self grant us a lasting sort of peace?

What greater gift can we give than a part of ourselves? What better method of improving the quality of life or actually the saving of a life than through the act of Organ Donation. The concept is still new to many of us and, as with all new ideas, the misunderstandings are many.

Through organ donation, anatomical gifts are given and dispersed to those adults and children who are awaiting the gift of life. This is a gift only YOU have the power to give. Currently, eyes, kidneys, pituitary glands, skin, livers, hearts, bones, lungs and pancreases can be donated for surgical transplantation and therapy. Organ donation is "the transfer of life rather than the ending of life." The medical expertise to accomplish grandiose feats is available, only the donors and necessary legislation on the parts of participating states remain to be hammered out.

In Oklahoma last year, Governor Nigh was ready to sign a proclamation naming April 20-26, Donor Awareness Week, but public misconceptions caused him to cancel it. Currently a governor's committee planning legislation and a subcommittee to develop the bill have

recently been appointed. Auxiliary's Keith Oehlert, Phoenix Chairman, and Drs Stan Muenzler and James C. Hays of OSMA will serve in this capacity.

National Organ Donation Awareness Week became a reality in April, 1981, when CiCi Hazelrig, Chairman of Washington State Medical Auxiliary Organ Donation Program lost her youngest daughter, Michele, in a tragic accident. Michele carried a donor's card and when it became evident she could not survive, her parents with the help of an ICU nurse, salvaged, posthumously, her pituitary gland for growth hormone and both corneas were retrieved.

Later her parents experienced the tremendous joy of a phone call from the Lions Eye Bank in Seattle, telling them that "both Michele's corneas had been successfully transplanted, both to a young girl in her twenties." To the parents the thought that "some" of their little girl is still living was a comforting thought. Spurred on by her personal loss and with the cooperation of Governor Spellman and many other agencies Mrs Hazelrig brought about the first Organ Donor's Awareness Week in the United States.

Recently, Jamie Fiske, an 11-month-old girl who would have died by her first birthday had she not received a new liver, received that organ from 10-month-old Jess Bellon killed in a car-train collision. The Bellon parents heard the plea of the Fiskes and approved the donation.

If in seeking to understand the mystery of a Child's birthday that affects us so, we recognize that His coming to earth to share in our miseries as humans was the ultimate in sacrifice; we realize that He passes His courage to us. Particularly at this time of year, we are offered a foretaste of what greatness can be ours if we behave in a manner appropriate to His example. Sharing, caring, love — Christmas — that's what it's all about. Peace!

— Betty Edge, President

Watch the Journal for results of the public opinion survey of Oklahoma residents commissioned by the AMA on behalf of the Oklahoma State Medical Association. The survey dealt with a variety of issues relating to the practice of medicine, including the main problems facing health care, competition in medicine, satisfaction with last physician visit, ability to pay medical costs, and personal lifestyles and health. It was conducted concurrently with an AMA national opinion survey, and results are compared with those of the national survey. Larry Freshnock, PhD, director of survey and opinion research for the AMA, analyzed results of the state survey for the OSMA Council on Planning and Development at the council meeting October 30-31. The association plans to use the survey data to aid in planning and evaluating association programs.

Enid internist William R. Smith, MD, has been elected to a three-year term on the Board of Trustees of the American Society of Internal Medicine (ASIM). Dr Smith, is past president of ASIM's Socioeconomic Research and Education Foundation, past president of the Oklahoma Society of Internal Medicine, past president of the Garfield County Medical Society, and a trustee of the Oklahoma Medical Research Foundation. He currently serves as director of medical oncology at Bass Baptist Hospital and as associate clinical professor of medicine at the University of Oklahoma medical school. ASIM is a federation of 51 component societies representing internists, internal medicine subspecialists, and neurologists nationwide.

Joseph D. McKean, Jr., MD, medical director of emergency medical services at Midwest City Memorial Hospital, has been elected to

the Board of Directors of the American College of Emergency Physicians (ACEP). Dr McKean became medical director of the hospital's emergency department in 1972. In 1975-1976 he helped establish the Midwest City Ambulance Service and has served voluntarily as the medical director since that time. He also is medical director of Emergency Physicians of Oklahoma, Inc, and Minor Emergency Clinics of Oklahoma, Inc. ACEP is a professional organization representing more than 11,000 emergency physicians across the country.

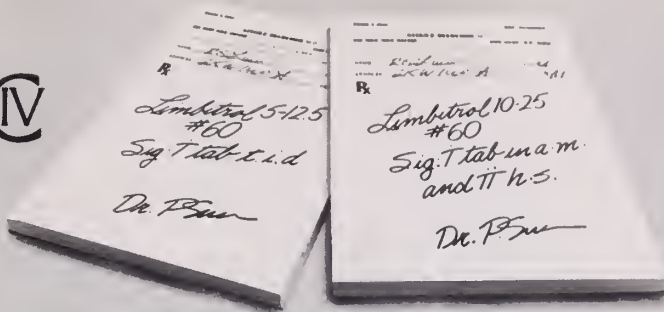
With the addition of four programs, the AMA Video Clinic Library now offers 25 outstanding CME study courses on subjects directly related to physicians' needs. The four new programs are: Rehabilitation After Myocardial Infarction; Obesity and Overweight; The Anemic Patient; and Dementia: A Clinical Approach. Each Video Clinic provides a complete CME package — color tape videocassette, study guide, self-assessment tests, and forms for CME credit. For information on ordering contact the AMA Division of Meeting Services at (312) 751-5951.

"Future Directions for Medical Education," an AMA Council on Medical Education report adopted by the AMA House of Delegates at the 1982 annual meeting, is now available in book form. The book contains recommendations on medical education at all levels and on premedical education, licensure, specialty boards, and foreign graduates. An appendix provides a historical survey of major factors and events that have influenced medical education. For a copy write to Secretary, Council on Medical Education, American Medical Association, 535 N. Dearborn St., Chicago, IL 60610. □

Limbitrol®

Tablets 5-12.5 each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt)

Tablets 10-25 each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt)



In anxious depression,

SPECIFIC FOR THE NONPSYCHOTIC PATIENT

Fits the picture of anxiety/depression correlation

Most patients with a mood disorder have a mixture of anxiety and depression. One clinician¹ found a correlation of 0.7 in anxiety and depression scores; another² has estimated that 7 of 10 nonpsychotic depressed patients are also anxious. For the dual symptomatology of anxious depression, Limbitrol provides dual medication.

More appropriate for the nonpsychotic depressed and anxious patient

Limbitrol contains both amitriptyline, specific for symptoms of depression, and a benzodiazepine, specific for the symptoms of anxiety. Thus it is a better choice than other dual agents for anxious depression that contain a phenothiazine, a class of antipsychotic drugs less specific for anxiety and now generally avoided in nonpsychotic patients.^{2,3}

Avoids the risk of tardive dyskinesia carried by the phenothiazine combinations

The causal relationship between the phenothiazines and other extrapyramidal side effects, including tardive dyskinesia, is well established. In contrast, the reported incidence of these adverse reactions with Limbitrol or either of its components is rare.

References: 1. Cloghly J: *Psychosomatics* 11:438-441, Sept-Oct 1970. 2. Rickels K: Drug treatment of anxiety, in *Psychopharmacology in the Practice of Medicine*, edited by Janik ME. New York, Appleton-Century-Crofts, 1977, p 316. 3. Boldessarini RJ, Torsy D: Tardive dyskinesia, in *Psychopharmacology: A Generation of Progress*, edited by Lipton MA, DiMascio A, Kilkom KF. New York, Raven Press, 1978, p 999.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of moderate to severe depression associated with moderate to severe anxiety.

Contraindications: Known hypersensitivity to benzodiazepines or tricyclic antidepressants. Do not use with monoamine oxidase (MAO) inhibitors or within 14 days following discontinuation of MAO inhibitors since hyperpyretic crises, severe convulsions and deaths have occurred with concomitant use; then initiate cautiously, gradually increasing dosage until optimal response is achieved. Contraindicated during acute recovery phase following myocardial infarction.

Warnings: Use with great care in patients with history of urinary retention or angle-closure glaucoma. Severe constipation may occur in patients taking tricyclic antidepressants and anticholinergic-type drugs. Closely supervise cardiovascular patients. (Arrhythmias, sinus tachycardia and prolongation of conduction time reported with use of tricyclic antidepressants, especially high doses. Myocardial infarction and stroke reported with use of this class of drugs.) Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving).

Usage in Pregnancy: Use of minor tranquilizers during the first trimester should always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Since physical and psychological dependence to chlordiazepoxide have been reported rarely, use caution in administering Limbitrol to addiction-prone individuals or those who might increase dosage; withdrawal symptoms following discontinuation of either component alone have been reported (nausea, headache and malaise for amitriptyline; symptoms [including convulsions] similar to those of barbiturate withdrawal for chlordiazepoxide).

Precautions: Use with caution in patients with a history of seizures, in hyperthyroid patients or those on thyroid medication, and in patients with impaired renal or hepatic function. Because of the possibility of

suicide in depressed patients, do not permit easy access to large quantities in these patients. Periodic liver function tests and blood counts are recommended during prolonged treatment. Amitriptyline component may block action of guanethidine or similar antihypertensives. Concomitant use with other psychotropic drugs has not been evaluated. Sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precautions about pregnancy. Limbitrol should not be taken during the nursing period. Not recommended in children under 12. In the elderly and debilitated, limit to smallest effective dosage to preclude ataxia, over-sedation, confusion or anticholinergic effects.

Adverse Reactions: Most frequently reported are those associated with either component alone: drowsiness, dry mouth, constipation, blurred vision, dizziness and bloating. Less frequently occurring reactions include vivid dreams, impotence, tremor, confusion and nasal congestion. Many depressive symptoms including anorexia, fatigue, weakness, restlessness and lethargy have been reported as side effects of both Limbitrol and amitriptyline. Granulocytopenia, jaundice and hepatic dysfunction have been observed rarely.

The following list includes adverse reactions not reported with Limbitrol but requiring consideration because they have been reported with one or both components or closely related drugs.

Cardiovascular: Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke.

Psychiatric: Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania and increased or decreased libido.

Neurologic: Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns.

Anticholinergic: Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract.

Allergic: Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus.

Hematologic: Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia.

Gastrointestinal: Nausea, epigastric distress, vomit-

ing, anorexia, stomatitis, peculiar taste, diarrhea, black tongue.

Endocrine: Testicular swelling and gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female and elevation and lowering of blood sugar levels.

Other: Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling.

Overdosage: Immediately hospitalize patient suspected of having taken an overdose. Treatment is symptomatic and supportive. IV administration of 1 to 3 mg physostigmine salicylate has been reported to reverse the symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment.

Dosage: Individualize according to symptom severity and patient response. Reduce to smallest effective dosage when satisfactory response is obtained. Larger portion of daily dose may be taken at bedtime. Single h.s. dose may suffice for some patients. Lower dosages are recommended for the elderly. Limbitrol 10-25, initial dosage of three to four tablets daily in divided doses, increased to six tablets or decreased to two tablets daily as required. Limbitrol 5-12.5, initial dosage of three to four tablets daily in divided doses, for patients who do not tolerate higher doses.

How Supplied: White, film-coated tablets, each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) and blue, film-coated tablets, each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt)—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 50.

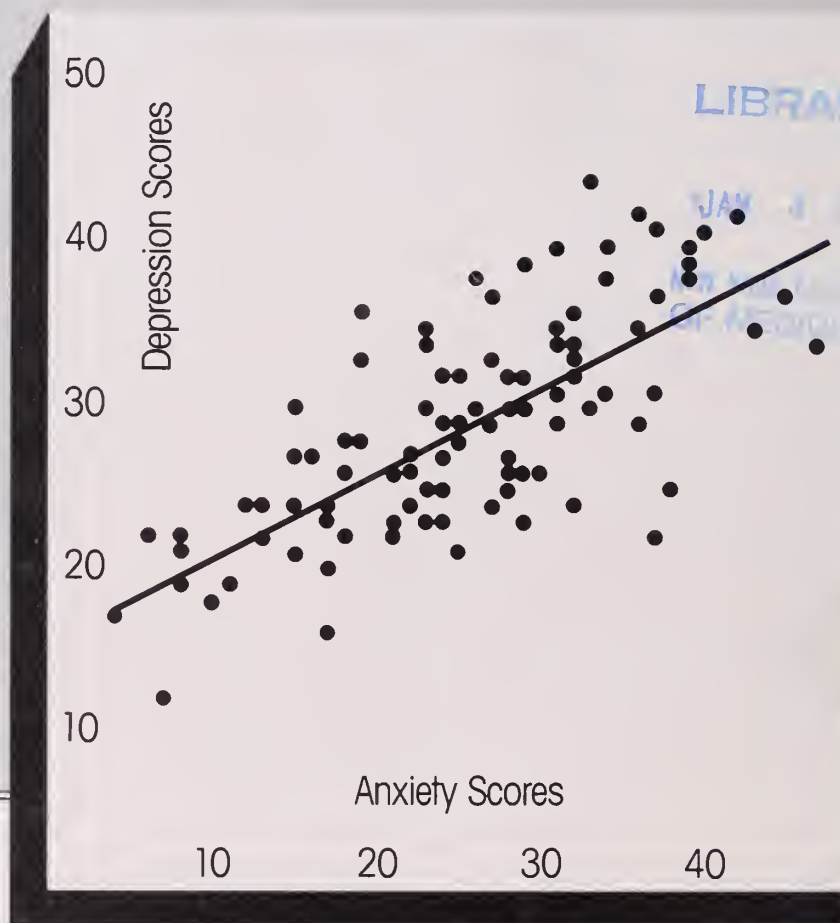


ROCHE PRODUCTS INC
Manati, Puerto Rico 00701

MORE DEPRESSION MEANS MORE ANXIETY...

The graph illustrates the close correlation between depression and anxiety derived through the MMPI and the Taylor Manifest Anxiety Scale in 100 nonpsychotic psychiatric patients. The Coefficient of Correlation is 0.7. As depression increased, so did the anxiety levels.

—Adapted from Cloghorm J¹



A key reason why MORE PHYSICIANS ARE CHOOSING LIMBITROL[®]

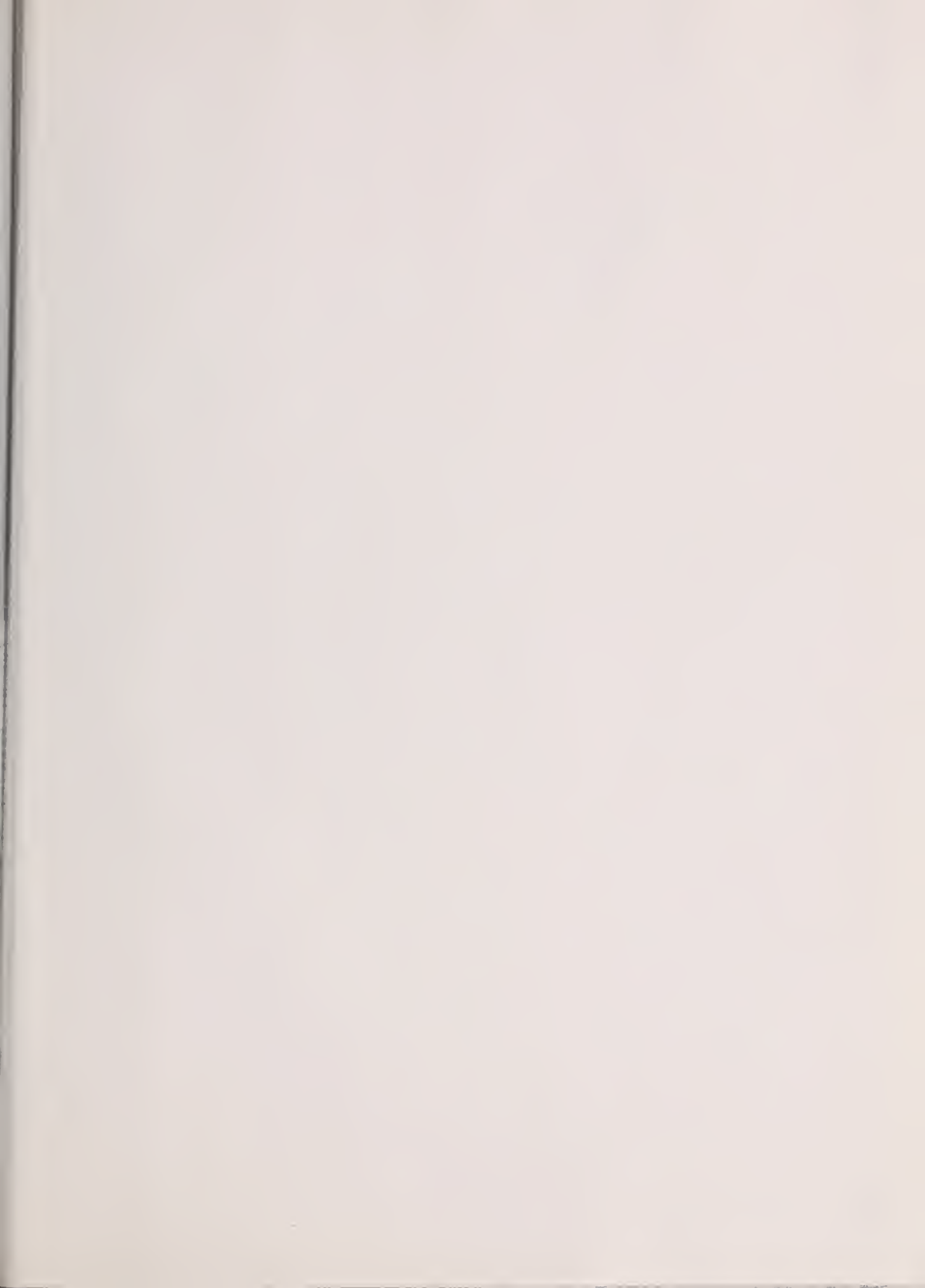
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1. Cloghorm J: *Psychosomatics* 11:438-441, Sept-Oct 1970

Please see summary of product information on inside cover.



DUE IN 4 WEEKS UNLESS RENEWED
NOT RENEWABLE AFTER 8 WEEKS

NOT RENEWABLE AFTER 8 WEEKS

[illegible]

